Quonset Point Naval Air Station Roger Williams Way North Kingstown Washington County

Rhode Island

HAER NO. RI-15

HAER RI, 5-KINGN,

PHOTOGRAPHS

WRITTEN AND HISTORICAL DATA

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HISTORIC AMERICAN ENGINEERING RECORD

S-KINGN,

QUONSET POINT NAVAL AIR STATION

HAER NO. RI-15

Location:

North Kingstown, Washington County, Rhode Island.

UTM: 19.297320.4608160

Date of Construction:

1939-1941

Present Owner:

Ownership is presently divided between the United States Navy, Naval Facilities Engineering Command, Northern Division, Philadelphia, Pennsylvania and the State of

Rhode Island and Providence Plantations.

Present Use:

Discontinued operations in 1974. Currently under development as an industrial park and general aviation

facility by the State of Rhode Island.

Significance:

The Quonset Point Naval Air Station is a typical example of the design and construction concepts that influenced major World War II era naval air stations. Until the time of its closing it was the largest single-unit

industrial employer in Rhode Island.

Historian:

Charles F. O'Connell, Jr.

December, 1979.

It is understood that access to this material rest on the condition that should any of it be used in any form or by any means, the author of such material and the Historic American engineering Record of the Heritage Conservation and Recreation Service at all times be given proper credit.

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GUIDE TO CHAPTER NOTES

When citing National Archives Record Group information, the following conventions were applied. Standard Navy abbreviations have been used throughout. Thus, the Bureau of Yards and Docks becomes BuDocks, the Bureau of Aeronautics becomes BuAer, the Bureau of Ordnance becomes BuOrd, etc. Each citation contains information on the file location of the material cited. The "NA" files contain general naval air station information; the "NA 43" files contain material pertaining specifically to Quonset Point.

PREFACE

This report is the product of an Historic American Engineering Record summer recording project. After a summer's concentrated effort, it is perhaps inevitable that a researcher begins to lose his sense of perspective about the "historical significance" of his topic. A student of the Quonset Point Naval Air Station is apt to fall victim to an attack of tunnel vision. Were it not for the quonset hut, the name itself would be recognizable to no more than a handful of persons outside Rhode Island who are not former naval personnel. Occupying a total area of about 1,000 acres, the base was neither the largest nor the smallest of America's military posts. Active from 1941 to 1974, it lacked the operational glamor of a McHenry or a Niagara or a Pearl Harbor. Despite its role as an outpost on the nebulous front lines of the Cold War, it failed to muster the technological renown of an Edwards or a Vandenberg. Why, then, the "summer's concentrated effort?"

Paradoxically, Quonset's relative obscurity is one of the keys to its value as an artifact of America's industrial and military heritage. The Navy built the United States Naval Air Station at Quonset Point, Rhode Island in response to a series of strategic and technological demands that evolved after the development of the submarine and the aircraft as effective instruments of war. The base is an excellent example of the Navy's response to the threat of the former and the potential of the latter. Quonset Point is, by almost any standard, typical of other naval air stations that the Navy built between roughly 1939 and 1945. In its layout and its construction, Quonset Point represented the state-of-the-art of air station planning in the late 1930's. It would be impractical to examine more than a handful of such bases, which at one time ringed the North American continent, protected the middle and north Atlantic, and stretched across the Pacific. Quonset Point serves as a reminder of American strategic thinking at a critical point in history.

The thirty-three year operational existence of the Quonset Point Naval Air Station also demonstrates the intimate link between the American military and the economic and technological development of the United States. Quonset Point was rarely an innovator, although there were significant exceptions. Its operations, especially in the field of aircraft overhaul and repair, were typical of similar procedures carried out at other American military airbases. The base was at one time the largest single-unit industrial employer in Rhode Island. As such, its impact on the surrounding communities is representative of the sometimes bittersweet relationship between a military post and its environs at many points throughout the United States and the world.

This report will trace the history of the Quonset Point Naval Air Station from the broadest possible perspective. It will examine the planning concepts and advisory boards that fostered the development of the base, the design and construction of the base, Quonset Point's operational history from 1941 to 1974, and finally the political and strategic decisions that led to the closing of the base in 1974. This report is not a comprehensive narrative about the base. It does, however, provide an overview of the history of the

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Quonset Point Naval Air Station, which may provide insight into how strategic requirements influence a broad range of social, political, and economic variables.

The author has benefitted greatly from the generous help offered by many individuals and organizations. I would like to acknowledge my debt to them. The staff of the Historic American Engineering Record in Washington provided much needed secretarial assistance and also furnished a convivial work place. The staff of the Rhode Island Historical Preservation Commission provided similar assistance during my time in Rhode Island. Dr. Timothy K. Nenninger of the National Archives was an invaluable source of information about relevant material in that institution's vast holdings. Librarians at the Naval War College Achives, especially Drs. Evelyn Cherpak and John Hattendorf, the Naval History Division Library and Classified Archives, Providence College and the Rhode Island Historical Society provided help that was of inestimable value. The staff of the Microfilm Room of the Providence Public Library handled my incessant requests for more material with good humor and great speed.

I must also single out five individuals for special thanks. The late Mr. Henry Conway, Chief Engineer for the Rhode Island Port Authority; Mr. Frederick C. Williamson, Director of the Rhode Island Department of Community Affairs and Rhode Island State Historic Preservation Officer; Captain Clarence O. Fiske, USN (Ret.); and Mr. William S. Allen all provided freely of their time for interviews. Their information and insighta were the keys to many of the numerous puzzles that inevitably aroae during the course of my research. I also wish to acknowledge the assistance of David Chase, Deputy Director of the Rhode Island Historical Preservation Commission, whose efforts to bring attention to the historical significance of Quonset Point, beginning in 1973, ultimately led to this H.A.E.R. recording project.

I extend my most sincere thanks to all those who helped me in any way on this project. They are, of course, in no way responsible for any errors, factual or interpretive, that may appear in this report.

The Ohio State University Columbus, Ohio November, 1979

CHAPTER 1 Introduction

The Quonset Point Naval Air Station, North Kingstown, Rhode Island provides a unique opportunity to study the tactical, technological and economic impact of changes in the strategic requirements of the United States. Constructed between 1939 and 1941 to fill a gap in the continental defenses of the United States, Quonset Point prospered only as long as the weapons system it supported, primarily land- and sea-based anti-submarine forces, remained an essential element in America's military posture. Changes in anti-submarine technology, coupled with a shift in the geographic focus of the submarine threat, diminished the strategic importance of the base. Having lost much of its military significance, the base was at the mercy of Defense Department cost-cutters in the early 1970's. Although a combination of fortuitous political circumstances acted to delay the actual closing of the base, its eventual demise was inevitable. Cognizant that it had lost much of its strategic significance and willing to accept the political consequences of an operational cutback, President Richard M. Nixon ordered the base closed in 1973. Operations at Quonset Point ceased in 1974.

Although official pronouncements invariably stress the strategic significance of a given action, there are of course other factors that influence the timing, scope, and location of military deployment. Regional and national political considerations and the continuing roles and missions controversy between the Army and the Navy all influenced the development of Quonset Point. The design and construction of the base itself reflected contemporary views on what a base should look like and what facilities it should have. Strategic considerations occasionally played a secondary role in influencing the development of Quonset Point as other variables acted on developmental priorities.

As an industrial, architectural and military artifact, Quonset Point also has a unique social history. The American military does not operate in a vacuum. Strategic decisions, whatever their origin, influence a broad spectrum of social variables. The decision to make Quonset Point a major overhaul and repair point on the East Coast helped to make the base the largest single-unit industrial employer in Rhode Island. The technical requirements of the Overhaul and Repair Department (also known as the Assembly and Repair Department and the Naval Air Rework Facility) fostered the growth of a pool of highly trained industrial workers, well versed in skills that were in many cases new to southern New England. This broadening of the technical skills of the regional labor pool is a legacy of the Naval Air Station that may eventually prove to be its greatest boon to the local economy. Yet, the economic impact of the multimillion-dollar annual base payroll cannot be underestimated. The sudden loss of this payroll undeniably hurt the area, at least in the short term.

Before these concepts can be discussed in any detail, however, it will be necessary to examine the development of naval aviation. Despite appearances to the contrary, Quonset Point did not spring fully developed into

the mind of some naval planner of the late 1930's. The base was in fact part of a long-planned development program that the Navy formulated in the early 1920's. The coming of World War II loosened Congressional purse strings and enabled the Navy to complete and in fact expand its base building program. But the seeds of this program were sown well before 1939.

* * * * *

The development of American naval aviation is a classic case study of the impact of technological developments on the evolution of military strategy, tactics and doctrine. The evolution of the aircraft as an effective instrument of war during the early years of the twentieth century forced the United States Navy to consider the possible consequences of the introduction of a potentially revolutionary weapons system. Once the Navy decided that aircraft could simultaneously support and threaten the fleet, it had to develop deployment concepts that would foster the most effective use of naval aviation. Proponents of aviation in the Navy suggested programs to meet this goal. However, the traditional peacetime frugality of Congress delayed the completion of these programs. When funds became available during the First World War, the Navy constructed many of the shore-based aviation facilities it had planned before the war. The same pattern of peacetime parsimony and wartime profligacy recurred during the 1920's and 1930's. Once again, as funds became available the Navy relied on long-standing construction and deployment programs to guide its expansion.

Official interest in naval aviation dates from at least 1898, when Secretary of the Navy John D. Long appointed several naval officers to sit on an interservice board assigned to investigate the potential of Samuel P. Langley's aircraft design. The ultimate failure of this machine relegated military aviation to a position of minor importance in official circles. Despite official disinterest at the highest levels, junior officers interested in aviation and civilian aeronautical pioneers continued their work. These efforts were rewarded in 1903 when the Wright brothers took to the air at Kitty Hawk, North Carolina. It was not until September 1908, however, that the Navy, at Army invitation, sent Lieutenant George Sweet and Naval. Constructor William McEntee to Fort Myer, Virginia to serve as members of the Aeronautical Board appointed to observe Orville Wright's demonstration flights. By 1909 the Navy had come under increasing pressure from within to purchase aircraft.

Despite a slow start, interest in naval aviation grew. In September, 1910, Secretary of the Navy George von L. Meyer told his Assistant Aide for Material, Captain Washington I. Chambers, to answer queries about naval aviation, to watch technological developments, and to report on any that might interest the Navy. In this rather casual manner Chambers became the first naval officer to be permanently assigned to duties involving naval aviation. Shortly thereafter, on December 23, 1910, the Navy ordered Lieutenant T. G. Ellyson to report to the Glenn Curtiss Aviation Camp at North Island, San Diego, California for flight training. After training, Ellyson became the first naval aviator.

Official interest in aviation remained low key at best. As late as 1910 there was only one mention of aviation in the United States Naval Institute Proceedings. The article suggested that aircraft could never affect the outcome of a naval battle. The article concluded, "The flying machine of fiction may be a very formidable monster, but the real thing is feeble enough, the sport of wind and a hundred mischances."

At the time this was true, but a cadre of interested naval aviators was not easily discouraged. They set up their first aviation outpost at North Island, San Diego in 1910. By 1912, shortly before the Navy left the facility, ground equipment consisted mainly of canvas tents that served as both hangars and housing facilities. Twelve Navy men occupied the post, along with a number of Glenn Curtiss personnel. The U.S.S. Iris, a repair ship, provided support facilities. The post closed on May 3, 1912 because of a lack of funds. Shortly thereafter the Army took over the land for its own aviation program. By 1914, when the Navy looked for a place to establish its first official naval air station, Army activity had occupied so much of the site that the Navy had to look elsewhere. As a result, Pensacola, Florida became the site of the first naval air station.

Temporary facilities were a feature of the early air bases. The function of naval aviation was to support the fleet. Some officers feared that permanent facilities would restrict the mobility of naval aviation. For example, in August 1913, a storm destroyed all the hangars and damaged many of the aircraft at Annapolis, Maryland. The commander of the flying camp, James M. Murray, forwarded a recommendation, seconded unanimously by the pilots, for a permanent, storm-proof hangar at Annapolis. Captain Chambers in Washington refused to agree. He felt that the planes could not follow the fleet if they were tied to permanent facilities.

The year 1913 was critical in the history of naval aviation. On June 23, Secretary of the Navy Josephus Daniels issued General Order No. 41, which delineated the aeronautical responsibilities of the existing bureaus. Under this order, the Bureau of Construction and Repair assumed responsibility for aircraft construction, including hulls, landing gear, mooring gear and launching gear, as well as for all storage facilities, including hangars. The Bureau of Steam Engineering assumed direction of engine, generator, lighting, signal systems and radio equipment programs. The Bureau of Navigation developed precision instruments and handled personnel affairs.

On October 7, 1913, Secretary Daniels appointed a board, with Captain Chambers as senior member, to "prepare a comprehensive plan for the organization of a Naval Aeronautical Service." The November report of the Chambers Board suggested a plan that became the Navy's development and deployment program before World War I. It emphasized the need for the expansion of naval aviation and the integration of aviation units into the fleet. The report recommended that the Navy purchase fifty planes and fifty spares for deployment with the fleet, plus six land-based planes with tents for an advanced base ashore. It called for the procurement of specially

designed and equipped "aviation ships" or tenders, and the establishment of a permanent aeronautical station at Pensacola, Florida. The Board estimated that the cost of its program would be \$1,297,300.

The Navy arrived at Pensacola to establish its first air station in January 1914. The Navy had used the site as a minor base until 1912, but that base was essentially in ruins when the first naval aviators arrived. By February, however, an aviation school was in operation, under the command of Lieutenant Commander H. C. Mustin. The Navy assigned ships to Pensacola to handle personnel matters and to provide services beyond those available at the embryonic air station. The first ship so assigned was the battleship U.S.S.

Mississippi, although it was replaced by the cruiser U.S.S. North Carolina when the battleship left for service with the American naval squadron in the Mediterranean. The temporary nature of these ship assignments created severe administrative problems, because when the ship left it took the bases' personnel records with it.

The coming of the war in Europe in 1914 forced the Navy to take a more serious look at its aeronautical policies. In 1916, an unofficial "Cognizance Board" met to divide aeronautical responsibilities, roles and missions between the Army and the Navy. The Board decided that the Army would control aircraft operating with the field army, aircraft needed for coast defense fire control, and aircraft used for coastline point defense —— cities, forts, yards, etc. The Navy would control aircraft operating with the fleet, aircraft operating from shore bases but used for oceanic surveilance, and aircraft under the direct control of a naval district. Despite this rather complicated division of responsibility, the system worked well, even though the pressures of war tended to blur these operational distinctions.

The Naval Appropriations Act of August 29, 1916 is of more direct importance to the history of naval aviation in New England. Indeed, the story of the Navy's "Northeastern Airbase," which Quonset Point would become, effectively begins with this act. It authorized the Secretary of the Navy to appoint a board to choose sites for expanded naval aviation. The Helm Board, named after its ranking officer, Rear Admiral James M. Helm, submitted its preliminary report on December 30, 1916. When attempting to discuss naval aviation, the Board could only report that:

the present development of aeronautical machines . . . and the practical experience so far obtained in the utilization of such machines to meet the tactical and strategic needs of the fleet and the defense of the coast, is such as to preclude any determination at this time of any extensive system of aviation bases.

The Board recommended that a joint Army-Navy panel decide upon locations that might be used by both services. Despite the non-specific nature of these recommendations, at least one Board member, Captain M. L. Bristol, stated that he favored one base in the Chesapeake Bay and another in the Narragansett Bay

region. Although it would take twenty-eight years, this suggestion eventually reached fruition with the construction of the Naval Air Station at Quonset Point; the Navy built its Chesapeake area base at Norfolk, Virginia.

At least partly in response to the Helm report, the Secretary of the Navy, Josephus Daniels, established the "Board on the Development of Navy Yard Plans" (1916). The new Board's functions were to prepare a plan showing all essential bases, their functions, and the fleet units stationed at each, to draw up an "ideal navy yard" plan, to produce a general plan for each yard or station, and to draw up detailed station plans. Although this body was replaced by other planning organizations, its functions persisted, accounting in large part for the homogeneous design of most naval aviation stations. A descendant of this Board drew up the plans for Quonset Point.

Despite these advances in planning, when the United States entered World War I on April 6, 1917, the Navy had only one daval air station in operation, could muster only 48 qualified aviators or student pilots, and had only 54 aircraft on hand, none of which had been designed for the type of military operations now required. Besides the 48 aviation officers, the Navy could muster 239 enlisted men for immediate service with naval aviation. They maintained the handful of planes plus one airship and three balloons.

The primary function of naval aviation during World War I was fleet support, which included offshore patrol. Aircraft assigned to fleet support were attached directly to naval surface units. Virtually all the aircraft that served with naval aviation during the war were seaplanes. Generally each cruiser and battleship carried at least one aircraft. Offshore patrol aircraft operated from shore stations. The General Board patrol program of July 1918 called for major patrol bases on the Atlantic and Gulf coasts at 150-mile intervals, with rest stations in between. The aircraft generally patrolled out to the hundred-fathom curve -- roughly 75 miles. The base that protected southern New England during the war was located at Squantum, Massachusetts.

The pattern of military operations established during the First World War served as a guide for essentially similar operations during World War II. Although America's relatively brief involvement in the former precluded exhaustive tests of tactics or deployment concepts, the experience marked the introduction of the aircraft into the Navy as an effective adjunct to fleet operations. Decisions made on air station location and site development guided the actions of inter-war planners and ultimately influenced the development of World War II era naval air stations. However, although the Navy recognized the value of its First World War experience, fiscal restraints in the 1920's slowed the effective application of the lessons learned.

Interservice and intraservice rivalries also exerted a profound influence on the development of naval aviation in the 1920's and 1930's. Within the Navy itself, two issues were in question. By far the most important concerned the future role of aviation in the Navy. World War I experiences and post-war experiments conducted by the Joint Board, an Army-

Navy planning body, led to the conclusion "that it has become imperative as a matter of national defense to provide for the maximum possible development of aviation . . . in the Navy." The Navy Department then adopted the policy of supplying the fleet "with an adequate aviation force that will be an integral part of it."

This facile statement did not, however, eliminate resistance in some quarters to the growth of naval aviation. Vice Admiral William A. Moffett summarized the arguments in favor of more aggressive development of naval aviation when he wrote:

It is of importance that the Navy fully appreciate aviation; that it is not a threat to the naval profession unless the naval profession refuses to embrace it; that even if battleships should ever become obsolete, carriers and many of them would take their places; that planes are absolutely dependent upon ships for sea operations; that it therefore behooves the Navy as a whole and entirely to embrace aviation and to become thoroughly acquainted with it, so that they can use it to the fullest extent.

Despite these prophetic words, the argument persisted until World War II.

Others in the Navy debated the operational role of the aircraft in support of the fleet. There were those so impressed by the capabilities of the flying boat that they urged adoption of this type of aircraft as the major means of taking naval air power to sea. Others, actively engaged in or familar with experiments with shipborne aviation being conducted by the American and British navies, leaned toward the aircraft carrier. This issue did not die until the 1960's, when the Navy deactivated the last of its flying boats. In the interval, the Navy used both seaplanes and land planes on its carriers and in its shore stations. Both types required shore-based support facilities. As a result, coastal naval air stations, including Quonset Point, housed facilities for both types of aircraft, landplane runways and seaplane ramps.

The controversy surrounding statements made by Army Brigadier General William Mitchell also influenced the development of naval aviation. At the risk of oversimplifying a very complicated issue, it is sufficient to state that Mitchell wanted an independent air force controlling all elements of military aviation. The Navy and Marines, jealous of their own operational preogatives and reluctant to surrender control of a promising weapons system to a "foreign" power, countered by stressing the wide variety of roles and missions open to aviation. They believed that national security and service interests could best be served by giving each service control of its own aviation element.

The issues raised by this debate have never been completely resolved to the satisfaction of all parties concerned. The MacArthur-Pratt Agreement of January 1931 provided for the division of aeronautical responsibilities by mission, not geography. The Army assumed responsibility for coast defense;

Navy air would support the fleet and assist the Army when necessary. Under this plan naval shore stations were used for experimentation, construction, training, maintenance and repair, and support of fleet operations. As in World War I, these distinctions broke down quickly under wartime pressures, but they at least gave naval aviation specific missions, although these missions were ambiguously defined.

Mitchell's attack on the military establishment cost him his career. However, Mitchell, by criticizing the lack of proper organization of naval aviation, gave impetus to the movement to create a bureau of aeronautics in the Navy as an equal to other older bureaus. Previously the other bureaus had been reluctant to surrender any of their own jealously guarded preogatives to a new body. Mitchell's outside threat made the other bureaus more amenable to the idea of a new bureau. As a result, on July 12, 1921 a bill to create a separate Bureau of Aeronautics became law. A General Order issued by Secretary of the Navy Edwin Denby on August 10, 1921 officially established the bureau. William A. Moffett, promoted to Rear Admiral, became Chief of the Bureau when it began operations on September 1, 1921. Moffett served as Chief of the Bureau of Aeronautics until his death on April 4, 1933 in the crash of the airship U.S.S. Akron.

Secretary Denby's order named the Chief of Aeronautics as adviser to the Chief of Naval Operations on aviation. The order stipulated that the Chief of BuAer keep the CNO informed "on all aeronautic planning, operation, and administration." The order also authorized the new bureau to recommend the detail of officers to flying duty and the distribution of aviation ratings, as well as to recommend methods of training. The order stated that the other bureaus were to perform their aviation-related work in a manner acceptable to the Bureau of Aeronautics and to accept BuAer's recommendations as to the priority to be given to various types of aviation equipment and facilities.

BuAer consisted of four divisions: Plans, Administration, Material, and Flight. The Material Division is most closely linked to the story of NAS Quonset Point. Material was the largest of the four divisions, with three operating sections: design, procurement, and maintenance. The specific role each played in the development and operation of Quonset Point will be discussed below.

Between 1923 and 1929 the Navy developed plans for the development of shore-based patrol facilities. On January 13, 1923, the Rodman Board, Rear Admiral Hugh Rodman presiding, submitted its report, which became a key planning document. The report called for the development of a string of continental bases, located at approximately six-hundred-mile intervals, on the Atlantic, Pacific, and Gulf coasts. The report called for a "Northeastern Airbase," to be located somewhere in New England. According to Rodman Board estimates, the Navy could build the recommended bases between 1925 and 1944, limiting its annual expenditures to about \$850,000. Even this limited projection proved to be overly optimistic, however. Congress was unwilling to appropriate the necessary funds, and what money was available went for

aircraft, not shore facilities. Regardless, the Rodman Board Report served as the key aviation planning document until the Hepburn Board made its report a decade later.

The Navy had recognized the need for a "Northeastern Airbase" even before World War I, and the impetus for some type of development grew throughout the 1920's. These ideas reached fruition in the late 1930's and early 1940's because of a growing awareness of the threatening world situation. Quonset Point did not specifically enter Navy planning programs until 1938, however, when the expansion of naval aviation made the provision of more land-based facilities an absolute necessity.

NOTES

Material for the Introduction was drawn from the following sources: Samuel Eliot Morison, History of United States Naval Operations in World War II, Volume I: The Battle of the Atlantic, September 1939 - May 1943 (Boston: Little, Brown and Company, 1947); Ivor D. Spencer and Donald M. Foerster, "United States Naval Administration in World War II." Deputy Chief of Naval Operations (Air). Volume XI: Aviation Shore Establishments (Unpublished manuscript, Naval History Division, Washington); Elretta Sudsbury, Jackrabbits to Jets: The Story of NAS San Diego, California (San Diego: Hall and Ojena, Publishers, 1967); Archibald D. Turnbull and Clifford D. Lord, History of United States Naval Aviation (New Haven, Conn.: Yale University Press, 1949); United States Office of Naval Operations, United States Naval Aviation, 1910 -1970 (Washington, GPO, 1970); George VanDeurs, Wings for the Fleet: A Narrative of Naval Aviation's Early Development, 1910-1916 (Annapolis, Md.: U.S. Naval Institute, 1966). The quote on page 13 is from VanDeurs, Wings, p. 4; that on page 17 is from USONO, Naval Aviation, p. 15; that on page 20 is from Morison, Naval Operations, Vol. I, pp. xlvii-xlviii; the extended quote on page 20 is from Sudsbury, Jackrabbits, p. 79.

CHAPTER 2 Naval Aviation: Planning Concepts in the 1930's

The serious deficiencies that plagued naval aviation and the Navy as a whole throughout the 1920's were not the result of apathy or lack of vision within the Navy itself. The shortcomings grew out of three influences at work in the American political environment after World War I. First, most of the nations of the world had signed treaties limiting naval armaments. The United States adhered scrupulously to these treaties, even refusing to authorize naval construction to treaty limits. Second, many well-meaning individuals and organizations lobbied extensively against military spending of any kind. These groups occasionally exerted an inordinate influence on Congress. Third, General Mitchell's crusade to find an expanded role for airpower at the expense of the other services, especially the Navy, also helped to weaken naval preparedness. Nevertheless, Navy air made significant if limited progress during the inter-war period in the face of these external pressures.

In the 1930s events overseas forced Americans to re-examine their commitment to defense spending and military preparedness. In 1931 Japan invaded Manchuria and in 1933 Hitler became Chancellor of Germany and began rearming that nation. In response to these events, Congress passed the "Vinson-Trammell Act" on March 27, 1934. This act authorized naval construction to treaty limits and authorized an additional 650 planes for naval aviation. Prior to this act, the authorized strength of naval aviation was 1,000 planes. The act also approved limited construction at naval facilities as public works projects to help alleviate Depression-era unemployment. The Vinson-Trammell Act established a priority system for the expenditure of public works funds for naval base improvements. Top priority went to the West Coast, the Canal Zone, Hawaii, the Philippines, and Guam. The New York, Philadelphia, Boston, and Chesapeake Bay areas rated secondlevel priority. Key West, Guantanamo, Pensacola, and Charleston came under the next level, followed by the Great Lakes, Alaska, and Samoa in category four.

Although by this time the Navy was glad to receive funding of any kind, the act contained at least one serious flaw. It did not specifically authorize construction to meet the needs of the larger number of planes. Some money was spent on naval aviation facilities, but there was no systematic expansion of the shore-based air establishment. Newly authorized aircraft only added to overcrowded conditions at existing bases.

Between 1934 and 1939, the Federal Government spent a total of \$36,000,000 on thirty aircraft facilities. Naval air stations at Lakehurst, Pensacola, Seattle, San Pedro, and San Diego each received more than \$1,000,000. These funds came from two sources, the Works Progress Administration and the Bureau of Aeronautics. For example, a \$173,248 project at San Pedro in 1937 cost the WPA \$95,982 and BuAer \$77,266. In general, WPA funds paid for labor, while BuAer provided the necessary equipment and material. As a result, the Bureau of Aeronautics suggested "that the whole project be worked upon the basis of providing the very cheapest type of temporary construction, in order to keep material costs down."

Although the act itself did not recognize the link between numbers of aircraft and facilities, the Navy knew that construction had to accompany aircraft purchases. Soon after the passage of the bill, Admiral Ernest J. King, BuAer chief, wrote:

In view of the large increase of aeronautical equipment of the Navy as a result of the Vinson-Trammell Bill, . . . there is an immediate and urgent need for an enlargement of the accommodations for such aeronautical increase ashore and afloat. . .

In the same memo, King suggested that exisiting West Coast naval air stations receive priority funding. Throughout the period, in fact until the fall of France in 1940, the Japanese threat in the Pacific tended to mesmerize many American naval planners. However, New England did receive some benefits from Vinson-Trammell and the resulting construction. NAS Squantum, Mass., although small and used only as a Naval Reserve base, was tentatively selected as the home base for two squadrons of patrol aircraft.

Naval expansion placed additional burdens on BuAer. Before the mid-1930's, limited maintenance facilities existed at the various naval air stations. These facilities performed the dual function of providing major overhaul and periodic maintenance for the squadrons operating from that base. As the aviation establishment grew, BuAer recognized that it would be more efficient to divide these functions — to provide squadron maintenance facilities as well as major overhaul points. As a result, by 1937 the Navy was attempting to formulate a program to provide for regional overhaul facilities for its expanding air arm. When Quonset Point appeared on the drawing boards the Navy, recognizing the need for a major maintenance facility to serve the Northeast, decided to construct a large-scale assembly and repair shop on the base.

By 1937, the Navy had in commission seven naval air stations, two fleet air bases, and the Philadelphia Naval Aircraft Factory. NAS Norfolk and NAS San Diego were the two main east and west coast fleet aviation bases. NAS Pensacola provided the facilities for all primary flight training. The other bases were generally small and provided only minimal facilities for patrol plane squadrons. However, the continuing deterioration of the world situation focused attention on the inadequacies of the naval aeronautical establishment.

Germany's annexation of Austria and its attempts on Czechoslovakia in 1938 made Hitler's long-range goals readily apparent to most military observers. In Asia, the Japanese incursion into Manchuria had become a full-scale invasion of China. Japan also cast covetous eyes on the Pacific islands it hoped to add to its "Greater East Asian Co-Prosperity Sphere." President Franklin Roosevelt pushed Congress to fund greater military preparedness. Congress, aware that the voting public was still largely unwilling to accept massive increases in defense spending, acted slowly, but began approving evergreater military expenditures. One part of this spending surge was the "Vinson Bill," passed on May 17, 1938.

The Vinson Bill authorized a 20% increase in ship construction and directed that naval aviation should be increased by almost 100%, to 3,000 aircraft. In comparison to the 1934 Vinson-Trammell Act, this bill recognized that more aircraft would necessitate more ground facilities. As a result, Public Law No. 528, 75th Congress, 3rd Session, "An Act to establish the composition of the United States Navy, to authorize the construction of certain naval vessels, and for other purposes," contained Section 10(a), which read:

The Secretary of the Navy is hereby authorized and directed to appoint a board consisting of not less than five officers to investigate and report upon the need, for purposes of national defense, for the establishment of additional submarine, destroyer, mine, and naval air bases on the coasts of the United States, its territories, and possessions.

On June 7, 1938, Acting Secretary of the Navy Charles Edison ordered Rear Admiral Arthur J. Hepburn, Commandant of the Twelfth Naval District, to head the board authorized by this act. The other members of the board, appointed at the same time, were Rear Admiral Edward J. Marquart, Captains James S. Woods, Arthur L. Bristol, and Ralph Whitman; Lieutenant Commander William E. Hilbert acted as recorder. The Hepburn Board visited existing bases and investigated sites for new ones in the summer and fall of 1938.

The Navy gave the Hepburn Board free hand in selecting the sites for new bases, although it did provide the board with a number of planning documents produced by other, similar bodies. One of these stressed the need for additional facilities on the East Coast. A 1937 letter from BuAer to the CNO described the extreme overcrowding at NAS Norfolk and repeatedly noted that more aircraft would completely swamp that facility. However, the same document recommended against actually building any new east coast bases at that time:

Due to the inadequacy of facilities on the Pacific coast and in Panama and Hawaii for the accommodation of aircraft now operating there, the provision of new facilities in those locations becomes an urgent requirement. Until these urgent requirements on the Pacific Coast and in Panama and Hawaii are met, new naval airbase developments on the Atlantic Coast should not be undertaken. Therefore, additional Atlantic Coast airbases are not in immediate prospect and detailed planning of these bases and recommendations for such facilities have been deferred to make way for developments of higher priority. 12

A 1934 letter from Admiral Ernest J. King, Chief of the Bureau of Aeronautics, also made available to the Hepburn Board, noted that "The need for an air base (naval air station) in the New England area in order to round out the strategic requirements for main naval air bases has been discussed previously with the General Board." King suggested two possible sites, one at

the Naval Reserve Aviation Base at Squantum, Mass., the other at an unspecified site attached to the Naval Training Station at Newport. This recommendation directed the attention of the Board to the Narragansett Bay region.

By far the most important statement of general aeronautical requirements available to the Hepburn Board was a 1936 memo from Rear Admiral A. B. Cook, Chief of the Bureau of Aeronautics, to the Secretary of the Navy regarding naval air bases. This memo grew out of Cook's awareness of "the present inadequacy of shore facilities," caused, as he saw it, "by the lack of any specific policy for the provision of naval air bases." Contemporary policy governing the provision of naval air bases came from two items in general Navy policy statements: "To maintain a shore establishment sufficient to assist the forces afloat in peace and capable of expansion to meet their needs in an emergency," and "To further the development of two main home bases on each coast." Cook believed that these statements were too broad to effectively guide aeronautical planners. 14

Lacking an adequate shore-station development program, the Navy had allowed aircraft procurement to surpass the capacity of the shore establishment to maintain the aircraft. The situation was especially bad on the east coast. Reflecting the persistent Pacific bias that remained an idee fixe among naval officers, Cook argued that although "the majority of the patrol squadrons will always be on the west coast with the fleet," the coast defense function of naval aviation made it imperative that the Navy "keep some patrol plane squadrons on the east coast to assist in the development of suitable plans and facilities for these missions." Cook recognized that the Navy lacked the funds to do everything that it wanted to do, but he believed that "no other type of vessel of other branch of the Navy is so inadequately provided with their essential supporting shore facilities as in Naval Aviation." To alleviate the overcrowding on the east coast, Cook recommended two new air stations, one south of Norfolk and one in Narragansett Bay. 15

Cook believed that the Navy needed the bases to carry out its assigned defensive missions in cooperation with the Army Air Corps. The bureaucratic insecurity engendered by the Mitchell affair still influenced naval planners. Cook was clearly concerned about this issue when he wrote:

The provision of adequate patrol plane bases and the completion of our present patrol plane program is necessary to place the Navy in a position to carry out readily its patrol plane missions assigned in Joint Army-Navy action. Without these planes and bases the inference by the Army Air Corps that they must provide for their own coastal -- reconnaissance because the Navy is unprepared to provide it may eventually receive sufficient credence to result in curtailing funds for Naval Aviation and even in the eventual assumption of certain Naval Aviation functions by the Air Corps.

Cook also noted that a comprehensive base policy would eliminate the "recurrent, and frequently embarassingly strong," efforts of local interests

to dictate the acquisition and development of base sites. Such efforts, especially when unsuccessful, created an unnecessary source of friction, "leading, very possibly, to political opposition to the Department's program." A comprehensive plan "would form the basis for orderly and systematic progress toward the goal" of establishing an adequate shore-based naval aviation establishment. The Hepburn Board formulated the comprehensive base development program Cook argued for so eloquently.

At least in part as a result of these ideas, the Hepburn Board recommended that the Navy construct its long-planned northeastern airbase at Quonset Point, but it placed development of the base in "Category B, for later development." The sites the Board chose for immediate development were generally situated in the Pacific (Guam and Pearl Harbor, for example), on the Pacific Coast (Seattle, Kodiak), or in position to guard the Atlantic approaches to the Panama Canal (San Juan and Coco Solo). However, political action shifted Quonset Point to Category A in 1939, and the coming of World War II placed all the Hepburn Board bases in line for immediate funding in 1940.

The Hepburn Board submitted its report, with its immediate and long term construction programs, to Congress on December 27, 1938. Hearings on the legislation that would authorize the construction of these bases began shortly thereafter. At the hearings, the members of the Board had to defend their choice of sites and to argue for the immediate funding of at least the Category A bases. The hearings were held before the twenty-six member House Committee on Naval Affairs, chaired by Carl Vinson of Georgia.

The report the Hepburn Board submitted presented a summary of naval opinion on the general strategic situation facing the Navy and the nation, and the official naval view as to what actions should be taken to meet these challenges. The Board reported that there was a "gratifying unanimity of opinion" as to where bases of various types should be built and what their capacities and functions should be. 19

The Board echoed the Navy's view that the "peculiar geographic conditions confronting the United States" were responsible for creating the need for an element of duplication in the shore establishment. The essential idea behind this duplication was that "an adequate defense plan requires that the shore establishment must be capable of supporting the whole Fleet in either the Atlantic or the Pacific." 20

Although the Board also examined sites for other bases, it saw that the most pressing need was for additional aviation facilities:

Summarizing briefly the general situation as it appears to the Board, it may be said that the need for additional shore-based facilities for aircraft far overshadows that for destroyers, submarines, or mines. This need does not arise solely by reason of the large increase of strength authorized by the Act of May 17, 1938. Existing shore establishments have failed to keep pace with the requirements of the

The Board then suggested sites for the new facilities. Its recommendations were based on both "strategic necessities and the assurance of favorable operating conditions." Land acquisition and future maintenance costs also influenced the site selection process. The Board chose sites suitable for broad regional defense, noting that, "from a strategic point of view a difference of 100 miles means little in the location of a base." 22

Quonset Point finally made its appearance when the Board discussed aviation requirements on the east coast. The only major east coast airbase, Norfolk, was "entirely inadequate to serve the fleet in its peacetime operations or to take its <u>pro rata</u> of repair and overhaul work." Other existing facilities, at Squantum, Parris Island, Miami, Cape May, and Floyd Bennett Field were either not in strategic locations, even as broadly defined by the Board, or lacked space for future expansion. Thus, the Board had to look for a site for a completely new facility. 23

A Rhode Island resident, William Slater Allen, apparently brought the Quonset Point site to the attention of the Hepburn Board. Allen, an engineer and a Lieutenant (J.G.) in the Naval Reserve, was serving as Chairman of the Rhode Island Industrial Commission at that time. Allen reports supplying the Board with relevant data on Quonset Point's seaside facilities, rail connections, water supply, and the like. The Navy was impressed with the information, although Allen maintains that the first inkling that he had that the site had been chosen came when he first noticed construction activity at the base. In any event, Allen recalls that he mentioned the Quonset Point site to the Board because he knew the base would be a great economic boon to the Rhode Island economy. He was not primarily concerned with strategic considerations. 24

Officially, the Hepburn Board reported that, because of the character of the terrain and the density of population in the New England-Long Island area, there were few sites suitable for base construction.

The most favorable site was found at Quonsett [sic.] Point, Rhode Island. This land is partly state owned and partly privately owned. The Land adjacent to the shoreline is generally privately owned and used for the development of a small summer colony. While the land available at this site is barely adequate in size, it is possible, with reasonable dredging and fill, to acquire sufficient terrain to build a major air base. Sufficient depth of water for carrier anchorage is available at the northern end of Conanicut Island. 25

Given these conditions, the Hepburn Board recommended that a major base be constructed at Quonset Point. The Board suggested that the base provide facilities for two carrier air groups, two patrol plane squadrons, a complete overhaul and repair facility, and a channel to permit carrier berthing at the Quonset pier. The Board also recommended that auxiliary fields be constructed near Quonset Point, as at all the proposed bases, to eliminate overcrowding. 26

Before the House Naval Affairs Committee, Board members explained in greater detail exactly why they chose Quonset Point. Admiral Hepburn explained that although "the northeastern main base has been discussed for years and years . . .," the only available facilities were at Squantum and that that base could not handle seaplanes. While they were looking for a site, they "did not go north of Boston to look at anything. We examined the charts and found nothing to be offered. We examined every inch of coast from the charts and you can tell from that what is worth investigating further."2

Later, Captain Bristol of the Hepburn Board explained another reason why the Board chose Quonset Point. Recalling arguments used in the Rodman Board Report in 1923, Bristol remarked:

. . . the Board decided that there was an unquestioned advantage in placing the New England airbase within the limits of the main fleet base in Narragansett Bay, if a suitable site could be found for the establishment of such an airbase. The strategic consideration involved is simply that of not separating your forces when this can be avoided. With the fleet based in the Narragansett Bay-Long Island Sound area, an airbase north of Boston or in the Cape Cod area would entail a long trip by water to enable ships at the airbase to join the fleet at its base.

The Board recommended Quonset Point "for later completion." Asked to explain why, Hepburn replied that the base would be very expensive to construct and that the Board members felt that "from an international point of view that area would probably be the last one to be questionable as far as hostilities were concerned." 29

The political considerations surrounding the construction of a military base became obvious during these hearings, as local officials from across the country tried to exert pressure on Congress to have facilities constructed near their municipality. The debate between Jacksonville and Miami over the location of the southeastern base reached such proportions that Claude Swanson, Secretary of the Navy, ordered the Hepburn Board back into session to examine the site question again. At the same time, the Board was asked to study the advisability of "locating a secondary or auxiliary air base or bases in the northeastern section." 30

Jacksonville interests lobbied hard for a base. Charleston, South Carolina and Miami also hoped to secure the planned facility, but they were clearly "outgunned" by Jacksonville. On March 10, 1939, the Jacksonville Chamber of Commerce presented a lengthy report detailing the advantages of that area, including briefs on the road, rail, and air network in the area.

communication facilities, weather, the labor situation, and other factors. Jacksonville's presentation was effective. The Hepburn Board, in its follow-up report, stood by its original decision and confirmed Jacksonville as the best site for the base.

Communities in the northeast had less success in their drive to expand the naval presence in New England. The Board reexamined six sites, five of them in Maine, and found most of them inadequate, generally because of their size or local climatic conditions. The Board suggested that Penobscot Bay might have developmental possibilities, but advised against building a secondary northeastern base. As late as November 1940, Maine interests were still trying to persuade the Navy to build a base in their state. In a letter to the Secretary of the Navy, Senator Margaret Chase Smith reminded the Navy that:

Citizens in the Penobscot Bay region, Maine, are again appealing to me to call to your attention that site as a location for a naval air base. Engineers have visited this site and reports are in your department.

If any section of the coast needs protection it is the state of Maine with its long coastline and its Canadian border.

Please advise if there is any consideration being given to the protection of Maine's coast by the use of Penobscot Bay.

This appeal, like most of the others, failed to move the Navy Department.

Some members of the House Naval Affairs Committee were reluctant to approve increased spending, especially for improvements at bases on Wake Island, Guam, and at Pearl Harbor. They feared that these actions might provoke Japan into striking out at the United States. The Navy knew that there was some risk that Japan would view the construction as a hostile action, but it also realized that without the improvements these posts could do little to deter Japanese aggression. The Navy decided to downplay the military value of these improvements. Rear Admiral Ben Moreell, Chief of the Bureau of Yards and Docks, warned a colleague:

The CNO informed me today that he desired to indicate that the proposed improvements at Wake Island and Guam were to be listed so as to minimize the military features. In this connection, he proposed, in the breakdown of the improvements for Wake Island, that we do not mention the number of squadrons for which the parking area is designed nor should we mention the number of caretakers.

With respect to Guam, we should have a breakdown indicating what work we are going to do there since the omission of such a breakdown might be viewed with suspicion by the committee. 34

Quonset Point fared extremely well at the hands of the Committee. The only point the Committee seriously questioned was Quonset Point's inclusion in "Category B" on the priority list. After a Congressional group led by Rhode Island Representative Harry Sandager visited the site on March 17, 1939, the

Congressmen returned to Washington to prepare the bill that would authorize the construction of the Hepburn Board bases. On March 28, 1939, the House Naval Affairs Committee recommended immediate authorization for Quonset Point, effectively including it in the Hepburn Board's "Gategory A". Quonset Point had taken its first significant step toward construction.

While the House Gommittee debated the recommendations, the Rhode Island Gongressional delegation moved to speed the authorization through Gongress. It is noteworthy that this activity was progressing while the members of the Hepburn Board were discussing their report before the House Gommittee. When the Rhode Islanders realized that a base was in prospect they acted to get the base constructed as expeditiously as possible. Thus the House Naval Affairs Committee's recommendation of March 28, 1939 reflected the work of both the Hepburn Board and the Rhode Island Gongressional delegation.

The key person in pushing the rapid development of Quonset Point was Rhode Island's junior Senator, Theodore Francis Green. Green, a Democrat, was a strong supporter of President Franklin D. Roosevelt, especially during his attempt to "pack" the Supreme Gourt. Green was able to use his relationship with Roosevelt to foster Quonset Point's place in naval planning. Green knew before the Hepburn Board made its report public that Quonset Point would be chosen as the site for future base development. Louis E. Denfeld, an aide to the Ghief of Naval Operations, Admiral William D. Leahy, and friend of Green's aide Edward J. Higgins, had told Higgins that the Office of Naval Operations survey of base sites indicated that Quonset Point would be an excellent site for a new base. Green, acting on this information, moved quickly to advance Rhode Island interests in Gongress. Green used his position as a member of the Naval Affairs Subcommittee of the Senate Appropriations Committee to good advantage during these political maneuvers.36

Senator Green's ally in these discussions was Rhode Island's Republican Governor, William H. Vanderbilt. The Governor would undoubtedly have preferred to work through Rhode Island's two Republican representatives, Charles F. Risk and Harry Sandager, but they could not match Green's influence in Gongress or with the White House. Green had access to the White House and was at least on friendly terms with the Navy Department. Despite any personal or political reservations the two may have had, the erstwhile political foes generally worked well together on the base issue.37

Green met with roosevelt to discuss the base's prospects. Roosevelt told Green that the base's outlook would be improved if the state would donate its land at Quonset Point to the federal government. The Navy informed Green that it would accept the land, but it refused to commit itself to constructing the base without specific Congressional sanction. Apparently at Green's suggestion, Governor Vanderbilt offered the federal government title to the Rhode Island National Guard camp at Quonset Point. On April 5, 1939, the rhode Island General Assembly passed H. 620 Substitute A: "An Act to Grant to the United States of America Land Now Owned by the State of Rhode Island and Providence Plantations at Quonset

Point in the town of North Kingstown, Rhode Island, for the Express Purpose of Establishing and Developing a Naval Airbase of the United States Navy."30

Once the state agreed to donate the land, Green introduced an amendment (S.830) to the Fiscal Year 1939 naval construction bill to authorize \$1 million for the acquisition of privately owned land at Quonset Point. Again, the Navy conditionally supported the amendment:

The CNO sees no objection to the proposed amendment provided that the additional \$1,000,000 is understood to be simply for the acquisition of land and the Navy Department is not thereby committed to undertaking actual development at Quonsett [sic.] Point, which would seriously jeopardize the other projects unless necessary money for such additional development is provided. 39

Green's amendment, introduced on January 25, 1939, had the effect of moving Quonset Point officially to the Hepburn Board's "Category A." On April 25, 1939 Public Law No. 43, 76th Congress, became law. The bill provided \$65,000,000 for military construction. This total included \$1,000,000 for land acquisition at Quonset Point. After almost twenty years of waiting, the Navy now had limited funding to begin site work at its long-planned northeastern airbase.

Interestingly, Green's effort to fund land acquisition at Quonset Point was attacked by the Providence <u>Journal</u>. In a January 29, 1939 editorial, the paper severely criticized Green's actions:

Senator Green's effort: . . is another example of his readiness to spend other people's money at every opportunity.

Senator Green's action places pork-barrel psychology above considerations of priority in providing for the common defense. It can be explained only by excessive eagerness to "get something" for his State, because a great deal of Federal money may be made available for defense. He displays little statemental in his shortsighted view of the entire national picture.

While Governor of Rhode Island Mr. Green was ever lavish in advocating the expenditure of public funds. He has not broken that habit. He will not impress his consituents in this instance who are thinking too realistically and patriotically of defense to debase the national interest to a mess of pork.

Despite these rumblings from the home front, Green continued to push for increased spending on Quonset Point. On October 2, 1939, Senator Green introduced S. 2975, "To Authorize the Secretary of the Navy to proceed with certain public works at Quonset Point, Rhode Island." This resolution would amend Public Law No. 43 by deleting the provision of the \$1 million for land acquisition and replacing it with a \$25 million appropriation for the construction of the base, including \$1 million for land purchases. With war raging in Europe, the Navy was anxious to push ahead with its Quonset Point development plans. It announced that it would support S. 2975.

There was little Congressional activity relating to Quonset Point between roughly November 1939 and May 1940. The Navy began to develop the facilities authorized by Public Law No. 43 (April 25, 1939). This involved work at six Pacific bases (Kaneohe, Midway, Wake, Johnston, Palmyra, and Pearl Harbor), three west coast bases (Kodiak, Sitka, and Tongue Point, Ore.), and five east coast or Atlantic facilities (San Juan, Pensacola, Norfolk, Jacksonville, and Quonset Point).

The fall of France in June 1940 lent much greater urgency to attempts to fund full Quonset Point construction. Senator Green wrote to President Roosevelt on May 11, wondering when full authorization for Quonset Point would be forthcoming. At approximately the same time, Massachusetts Representative George J. Bates directed virtually the same query to the Bureau of Yards and Docks. The response to both inquiries was essentially the same:

The development of this air station is one of a number of important projects which the Navy Department has under consideration. Recent developments have indicated the necessity for reviewing the entire situation with a view to developing a program which will be of immediate use in building up the National Defense. This review is now in progress, and it appears desirable to defer the decision relative to the development of Quonset Point until the review has been completed.

Representative Bates was especially critical of the Navy's apparent lack of response to events in Europe. Claiming that New England lay directly in the path of any transoceanic aggressor and aware that Quonset Point was supposed to protect New England, Bates proposed "to find out why work already has not been speeded there." Lewis Compton, Acting Secretary of the Navy, informed the House Committee on Naval Affairs, of which Bates was a member, on May 2, 1940 that the Bureau of the Budget had advised against spending the \$25 million. Bates testily replied that he was glad to have the Bureau of the Budget's opinion, "but I did not know that Congress had abdicated its authority to this or any bureau."

Bates was well equipped to ask these pointed questions because of a letter he had received from Admiral Towers, Chief of the Bureau of Aeronautics, in March:

The following information is supplied relative to the strategic value of the Naval Air Station, Quonsett [sic.] Point in connection with the National Defense Program:

Quonsett Point, with its excellent water conditions and shore facilities, embodies both carrier plane and patrol plane facilities within the limits of a single base. It is so located in the New England Area that the defense of our naval coastal area, extending from the continental limits to a line several hundred miles to seaward, can be adequately covered in any direction against hostile approach.

The density of population, manufacturing facilities, and communication lines throughout New England to all parts of the United States makes it of such importance that to be adequately defended a base of major importance must be located at the most strategic point.

By mid-May, even as Bates attacked official laxity on defense spending, the review promised by the Navy ended and President Roosevelt appeared before Congress to ask for \$57,262,363 for naval public works projects. Funds for the contruction of Quonset Point did not appear in this However, on May 31, 1940, before the first bill became law, the President presented another request for more funds. In his message the President referred to "the almost incredible events of the past two weeks in the European conflict," and asked for an additional \$1,281,000,000 for military procurement and construction. Of this amount, \$202,100,000 was allocated for naval base construction. These funds would enable the Navy to completely carry out the recommendations of the Hepburn Board, including construction at Quonset Point. Accordingly, H. R. 10055, the First Supplemental National Defense Appropriations Act, 1941, contained an appropriation of \$24,204,000 for aviation shore facilities at Quonset Point, Rhode Island. The bill became law on June 26, 1940; the funds would become available at the start of fiscal 1941: July 1, 1940. With the base fully funded, construction at Quonset Point could now begin. And it began immediately.

NOTES

 l Dudley W. Knox, "The U.S. Navy Between the Wars," in Morison, $\underline{\text{Naval}}$ Operations, $\underline{\text{I}},$ p. xxxiv.

²Turnbull, History, pp. 296-297, 285.

³U.S. Navy, Bureau of Yards and Docks, <u>Building Bases</u> (Washington: GPO, 1947), Vol. II, p. 3.

⁴Turnbull, <u>History</u>, p. 286; Ltr, L. A. Morrison to Capt. G. A. McKay, May 25, 1937, and Ltr, Norman Smith to Commandant, 11th Naval District, September 25, 1937, both File NAS San Pedro, Records of the Bureau of Yards and Docks, Record Group 71, National Archives.

 $^5\mathrm{Ltr},$ J. T. Matthews to G. A. McKay, June 2, 1937, File NAS San Pedro, RG 71.

⁶Memo, Ch/BuAer to CNO, February 18, 1935, File NA, Vol. 5, Records of the Bureau of Aeronautics, Record Group 72, National Archives.

7_{Ibid}.

⁸Memo, Plans Division, BuAer to Ch/BuAer, June 2, 1937, File NA, Vol. 5, RG 72.

9BuAer Memo, February 23, 1937, File NA, Vol. 5, RG 72.

Typescript, "Report of the Statutory Board on Submarine, Destroyer, Mine, and Naval Air Bases" (Hepburn Board Report), December 1, 1938, File NA, Vol. 5, RG 72, pp. 1-2. This report is also available as U.S. Congress, House, Report on the Need of Additional Naval Bases to Defend the Coasts of the United States, Its Territories, and Its Possessions. H. R. Document No. 65, December 27, 1938, 76th Congress, 1st Session. All further references are to the typescript, hereafter cited as HBR.

11 Ibid., p. 2.

12Ltr. Ch/BuAer to CNO, May 18, 1937, File NA, Vol. 5, RG 72.

 13 Ltr, Ch/BuAer to General Board, September 12, 1934, File NA, Vol. 5, RG 72.

14Memo, Ch/BuAer to SecNav, December 3, 1936, File NA to NA 11, RG 80, Records of the Office of the Secretary of the Navy, National Archives.

¹⁵Ibid.

16 Ibid.

17 Ibid.

18_{HBR}, pp. 12-28. 19_{HBR}, p. 9.

²⁰HBR, p. 6.

²¹HBR, pp. 7-8.

²²HBR, pp. 2-3, 23-24.

²³HBR, p. 32.

²⁴William Slater Allen, interviewed by author July 26, 1979, Providence, Rhode Island. An article in the Providence <u>Journal</u>, July 14, 1974, p. A-21 covers this information. There is nothing in the records of the Hepburn Board to confirm Mr. Allen's statements. Mr. Allen believes this is because of the great secrecy surrounding the project. However, presentations much like Mr. Allen's exist in the NA files (RG. 72).

²⁵HBR, p. 34.

²⁶HBR, p. 35.

27 Rear Admiral Hepburn to House Committee on Naval Affairs, January 26, 1939. In U.S. Congress, House <u>Hearings Before the Committee on Naval Affairs of the House of Representatives on Sundry Legislation Affecting the Naval Establishment, 1939.</u> 76th Congress, 1st Session, No. 18, "Hearings on H. R. 2880 to Authorize the Secretary of the Navy to Proceed with the Construction of Certain Public Works and for other Purposes." (Washington: GPO, 1939), p. 107.

28 Hearings on Sundry Legislation, 1939, No. 1, "To Authorize the Secretary of the Navy to Proceed with the Construction of Certain Public Works (To Partially Carry Out Recommendations of the Hepburn Board)," pp. 155-156.

²⁹Hepburn testimony in Hearings, No. 18, pp. 114-115.

30_{Ltr}, SecNav to Hepburn, February 23, 1939, File QB (119), Vol. 6, RG 72.

³¹See "Special Report to the 'Reconvened' Hepburn Board Showing Advantages of Jacksonville, Florida for Location of Southeastern Airbase," File NA, Vol. 6, RG 72.

32"Report on Secondary Northeastern Base," March 27, 1939, File NA, Vol. 6, RG 72.

 33 Ltr, M. C. Smith to SecNav, November 11, 1940, File NA 43, Vol. 2, RG 72.

- 34Confidential ltr, Adm. Moreell to Adm. Cook, January 17, 1939, File NA, Vol. 5, RG 72.
- 35 Manuscript, U.S. Navy, First Naval District, "First Naval District History - Aviation." Administrative History Appendices, #15TT, n. d., in Naval History Division Classified Operational Archives, p. 2.

 Serwin L. Levine, Theodore Francis Green, The Washington Years,

1937-1960 (Providence: Brown University Press, 1971), p. 95.

- 37 Ibid., pp. 95-96.
- 38 Ibid., p. 95; Historical Section, Quonset Point Naval Air Station, "History of Naval Air Station Quonset Point, Rhode Island, 7 June 1938 - 10 August 1944," typescript, December 29, 1944, p. 4, in Naval History Division Classified Operational Archives; Text of H. 620 Substitute A in File NA 43/A1-1, RG 71.
 - ³⁹CNO Memo, February 25, 1939, File NA 43/A1-1, Vol. 1, RG 71.
- 40BuDocks, Building Bases, pp. 27-28; "First Naval District History -Aviation, "p. 4; Levine, Green, p. 96; Ashley Davis, et al., "United States Naval Administration in World War II: Bureau of Aeronautics, Vol. XI, Aviation Shore Establishments. "Mss., 1957, Navy Department Library. Washington, pp. 12, 34-35.
 - ⁴¹Providence Sunday Journal, January 29, 1939.
- 42Green's amendment included in File NA 43/Al-1, Vol. 1, RG 71; Ltr, Ch/BuAer to CNO, October 17, 1939, File NA 43, Vol. 2, RG 72.
 - 43 BuDocks, Building Bases, p. 28.
- 44 Ltr, Adm. Moreell to Bates, May 16, 1940, File NA 43/Al-1, Vol. 1, RG 71; quote is from BuDocks draft of Roosevelt's response to Green, May 14, 1940, File NA 43/A1-1, Vol. 1, RG 71.
 - ⁴⁵Providence <u>Journal</u>, May 15, 1940, p. 6.
 - 46 Providence <u>Journal</u>, May 18, 1940, p. 12.
 - 47Ltr, Adm. Towers to Bates, March 5, 1941, File NA 43, Vol. 2, RG 72.
- 48BuDocks, Building Bases, pp. 30-31; BuDocks to BuAer, June 27, 1940, File NA 43, Vol. 1, RG 72.

CHAPTER 3 Early Construction Activities and the Neutrality Patrol

After almost twenty years of waiting for its northeastern airbase, the Navy entered a period of convulsive activity as the various authorization and appropriation acts made their way through Congress in late 1939 and early 1940. The story of Quonset Point from about March 1939 to March 1942 is one of a frantic struggle to obtain land and to design and construct a major aviation facility in the shortest possible time. President Roosevelt's decision to institute a Neutrality Patrol in September 1939 and the Navy's concurrent decision to base units of this patrol at Quonset Point initiated limited design and construction at the site even before Congress had granted funding for the base itself. The paroxysm of activity that resulted from these moves demonstrates how and why the Navy was able to bring its new facilities into service so quickly.

Before work could be begin on the air station facilities themselves, the Navy had to acquire title to the land at Quonset Point. Since this land was owned in part by the state and in part by private individuals, land acquisition would be a two step process. The Navy obtained title to the state land with little trouble, and work began almost immediately on this parcel as the site for the Neutrality Patrol facilities. The transfer of the private land took more time, but it was completed relatively quickly and with little rancor between the Navy and the property owners. Construction activities on the naval air station facilities began even before the land condemnation proceedings had run their course. The process of clearing the land began almost as soon as the Navy obtained title to a lot.

The Navy began detailed examination of the Quonset Point site as early as March 21, 1939, when the Bureau of Yards and Docks directed the commanding officer of the naval station at Newport to obtain property data from the local county clerk on land at Quonset Point, nearby Hope Island, and also to check on possible problems with a railroad spur to the site. The report from Newport provided the basic information on which the Navy based more detailed surveys. The Newport report, dated April 4, 1939, set the tentative land acquisition costs of Quonset Point area properties at \$1,318,550.

On April 5, 1939, the Rhode Island General Assembly authorized the transfer of state land to the federal government, although the actual transfer did not take place until mid-October. On April 25, 1939, Congress passed the authorization bill that contained the million-dollar appropriation for land acquisition at Quonset Point. The Navy feared that this sum would not completely cover the necessary real estate expenditures, but started condemnation proceedings nonetheless. On May 31, 1939 Acting Secretary of the Navy William D. Leahy ordered the Navy's Judge Advocate to institute the necessary legal proceedings to obtain the land the Navy wanted.

On June 17, 1939, Congressmen Bates of Massachusetts and Sandager of Rhode Island made a short visit to Quonset Point to investigate the properties the Navy wanted in the vicinity. One purpose of the visit was to investigate

a possible move by Brigadier General Herbert R. Dean, Adjutant General of the state of Rhode Island, to buy private land at Quonset Point for resale to the government. The Congressmen found that there was no conflict of interest. The Dean property was not needed for the base.

The Navy also hoped to obtain Hope Island for use by the base. The island, which lay in Narragansett Bay slightly northeast of the base site, was to be used as an ammunition storage area. Senator Green knew of the Navy's interest in the property and asked the secretary of the Navy to explain its possible functions. The Secretary replied that "Hope Island would provide an ideal safe stowage area for explosives which would otherwise have to be located on the proposed base proper."5

With funding available, appraisers went to work at Quonset Point in the summer of 1939. The Navy expected the appraisal and condemnation acres to the Federal government officially on October 16, 1939. By the end of 1939, less than one year after the Hepburn Board had officially recommended the site, the Navy was actively engaged in obtaining land. It is important to recall, however, that as of this time Congress had still not authorized the construction of the base.6

Partly in response to the growing uncertainty about the timing of the base construction, the residents of the summer colony at Quonset Point turned to Senator Green for help in determining the future of their cottages. In September 1939, the Navy announced that local residents would be allowed to stay on their property under temporary, revocable permits. Pressed by Green to be more specific, Admiral Moreell of the Bureau of Yards and Docks could only reply, in March 1940, that the residents could probably keep their homes through the summer of 1940. When Moreell made this statement Congress had not authorized construction. Congressional action in May and June 1940 quickly disrupted any plans cottage residents may have made for the summer. When construction began in July they were forced to vacate their property with little warning. 7

The appraisers filed their reports in May 1940. It appears that the Navy was able to satisfy local residents without trouble, since there is little evidence to suggest that there were court fights over equitable compensation for property. The total cost of this first phase of land acquisition at Quonset point, including the railroad right-of-way, funds for moving a cemetery, and appraisers' fees, was \$1,220,000. The Bureau of Yards and Docks sought and received the extra \$220,000 from the Bureau of Aeronautics. 8

There were those, especially persons whose land had not been purchased, who were less than enthusiastic about the prospects of having a full-sized air base as a neighbor. In January 1940 William A. Soban, Commander of Providence Post No. 1 of the American Legion, wrote to Senator Green complaining that the air station would make operation of a nearby Legion summer camp for underprivileged children difficult and hazardous. He demanded

compensation. The Navy refused to consider his protest because the Legion land was not needed and because the Navy maintained that the airfield would not expose the users of the camp to any undue danger. The Navy's response ended with a statement to the effect that many other people had to live near airports without compensation and that the Legionnaires would have to learn to cope with their noisy neighbor.

More seriously, the Beacon Oyster Company threatened to seek an injunction blocking construction of the base because of the damage such construction would do to the firm's oyster beds. This action was averted when the government informed the firm's attorney that funds were available for compensation. It is not known how much Beacon Oyster received, but it claimed to have \$75,000 worth of oysters in beds near Wickford.

The proposed railroad line to the base also created some minor friction. Governor Vanderbilt informed the Navy that "the people of Rhode Island" opposed the construction of grade crossings:

. . . but in view of the necessity for speed in constructing this Air Station we would approve the construction and operation of a grade crossing for temporary use, provided the Navy Department would give definite assurances that such grade crossing would be depressed (or elevated) before January 1, 1942.

These assurances were forthcoming, and the Navy built an overpass across the railroad right-of-way carrying the Post Road (U. S. Route 1).

In September 1940 the Navy obtained another 225 acres through condemnation proceedings at a cost of \$335,959. This brought the total land available for the base to approximately 1,000 acres and marked the end of large-scale land taking by the Navy. However, the Navy had begun work at the site even before the completion of the land acquisition process. This work generally involved Neutrality Patrol facilities.

The operational history of naval air forces at Quonset Point begins before the construction of the naval air station itself. War began in Europe on September 1, 1939, when Germany invaded Poland. Fighting quickly spread to the Atlantic Ocean, where German submarines attempted to cut Britain's overseas supply lines. This threatened American shipping in the Pacific, although at this time the United States was still officially neutral.

Some German diplomats recognized that American neutrality was an "unreal utopianism" that would vanish when "the values which concern the United States are at stake." The German Ambassador to the United States, Hans H. Dieckhoff, warned that "neither the indifference of the rank and file toward foreign affairs" nor "the dogmatism of the pacifists" would preserve American neutrality when the survival of Britain was threatened. America could preserve its neutrality as long as its strategic interests in Europe, and these included control over the Atlantic approaches to the Western Hemisphere, were protected by the French Army and the Royal Navy.

Hitler apparently believed that he could block American entry into the war in two ways. First, he had to knock America's European allies out of the war as quickly as possible. His means of accomplishing this task was the German Army, well-versed in the tactics of blitzkrieg warfare. Second, he ordered his Navy to avoid the western Atlantic and forbade his submarines to attack American ships anywhere on the high seas, hoping thereby to avoid dangerous "incidents." This two-pronged policy seemed prudent and sensible, but Hitler failed to consider that his successes would fail to intimidate the United States. In fact, the tide of German conquest seems to have pushed Roosevelt to a more belligerent position. Hitler's reticence also enabled Roosevelt to sieze the initiative in the western Atlantic. 14

On September 5, 1939, President Roosevelt ordered the Navy to establish a "Neutrality Patrol" along America's eastern sea frontier. The Neutrality Patrol had symbolic value, warning Hitler that the American people were concerned about German aggression and that active American involvement in the war was not beyond the realm of posibility. The Patrol also gave the President a course of action between the poles of acquiescence to German aggression and active involvement, for which the United States was unprepared, both spiritually and materially. The Patrol enabled Roosevelt to circumvent debilitating domestic antagonisms. Isolationists could support a scheme that aimed to keep belligerent shipping away from the approaches to the western hemisphere. Even pacifists and anti-military liberals could give at least grudging support to the Patrol, since it did not involve combat. 15

On September 4, 1939, the Chief of Naval Operations ordered Rear Admiral A. W. Johnson, Commander of the Atlantic Squadron, to establish an air and ship patrol for the purpose of "observing and reporting in cipher the movements of warships of the warring nations." The Navy had the Patrol organized by September 12, 1939, and its activities received the sanction of the nations of the western hemisphere at the Panama Conference on October 2, 1939. The Navy established seven patrol zones along the Atlantic Coast; Patrol 2, under Commander S. N. Moore, based initially at Newport and later at Quonset Point, patrolled the Narragansett Bay - Long Island Sound area.

Admiral Johnson expanded the Patrol's activities on October 16, 1939. Patrol craft were to report foreign warships and to trail warships and other suspicious vessels "until their actions were satisfactorily accounted for." Units were also authorized to:

perform missions of mercy on the contiguous high seas, prevent engagements between hostile belligerents within the territorial waters of the United States, train and indoctrinate personnel in the requirements of neutrality patrols, and to conduct gunnery and other training as conditions permitted.

Although the Neutrality Patrol's actions became decidedly nonneutral as America drew closer to the war, the original intention of the Patrol was peaceful and defensive.

At first, Patrol Squadron (Patron) 54 flew daily air searches from Newport in conjunction with surface patrols. The cruisers U.S.S. Quincy and U.S.S. Vincennes patrolled the sea approaches between Norfolk and Newport. The Navy established two more patrol plane squadrons at Quonset Point as facilities became available: Patron 52 on April 3, 1940 and Patron 53 on May 24, 1940.

The earliest construction activities at Quonset Point involved facilities designed and built specifically for the Neutrality Patrol. The Navy built these "temporary facilities" (in Navy parlance temporary meant that the structures were generally made of wood) on land at Quonset Point formerly owned by the state, the old National Guard Camp. The Navy planned to spend approximately \$750,000 on these facilities, not including \$810,000 for the "permanent" hangar.

The commanding officer of the Naval Training Facility at Newport assumed direction of the early construction activities at Quonset Point. As late as 1939, the Bureau of Aeronautics still had to remind its representatives in the field that, "In general, due to the temporary, emergency nature of the program and the limited funds available, only the minimum requirements that are essential for the operation of squadrons and comfort of personnel can be provided." BuAer told Newport to prepare Quonset Point to serve, initially, six patrol planes and sixteen observation or scouting aircraft. Personnel would use renovated National Guard barracks for housing. 22

Neutrality Patrol construction included ten "projects:" a seaplane hangar, barracks for 160 men and twenty chief petty officers; housing for forty officers; a seaplane parking area; a wooden ramp (to provide access from the bay to the parking area); dredging, filling, and bulkheads; roads, walks, sewer, water, and electric systems; three magazines (two high explosive, one small arms); a gasoline storage and distribution system; and a small boat landing. The Bureau of Yards and Docks forwarded copies of standard Navy plans for most of the required construction. Local contractors modified these plans, subject to the approval of the Bureau, as conditions demanded.

The Rhode Island Engineering firm of Jenks and Ballou designed most of the Neutrality Patrol facilities at Quonset Point. They provided the base plan and drawings for the personnel facilities. BuAer approved these plans on November 24, 1939, The Providence firm of Charles A. Maguire and Associates provided preliminary topographic and hydrographic surveys, [HAER-77] as well as plans and specifications for the dispensary, "similar to that shown on Y & D drawing No. 133073, entitled 'Dispensary, Sitka, Alaska,' with the omissions as indicated." Senator Green recommended Maguire to the Navy Department, and he thanked the Navy for choosing a local firm. Admiral Moreell of the Bureau of Yards and Docks thanked Green in return: "Our investigations of Mr. Maguire bear out in all respects the very fine recommendation which you gave him." O. Ahlborg and Sons, Inc., of Cranston, Rhode Island received the prime construction contract (NOy-3920) on February 29, 1940.

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The seaplane hangar was the only permanent (steel construction) building erected at Quonset Point by the Navy Department as part of the Neutrality Patrol facilities. The Detroit architectural firm of Albert Kahn Associates designed Neutrality Patrol hangars, replicated at each Neutrality Patrol base, including Quonset Point. The Navy sought bids for this \$810,000 project in November 1939. On january 8, 1940 the Navy awarded a \$29,379 contract for the concrete foundation to the J. F. Fitzgerald Co., Boston. 28

Since at least minimal facilities existed at the National Guard camp, Neutrality Patrol operations at Quonset Point began with little delay. On October 1, 1940 the first official naval operations at the Quonset Point Naval Air Station began with the commissioning of scouting squadron VS 2D-1 (Commander Harold J. Brow). On October 4, 1940, Brow reported to Captain Marc A. Mitscher of the Bureau of Aeronautics that "We have put the squadron in commission; the principal lack being that we have no airplanes, although I believe our first two will be ready by October 14." 29 BuAer told Brow to borrow a plane from the Floyd Bennett Naval Reserve Base, but also told him to return it when Quonset Point's first aircraft arrived. The borrowed aircraft arrived on December 14, 1940, soon after the seaplane hangar was completed. On January 6, 1941, two Vought-Sikorsky OS2U-2's arrived from the factory at Stratford, Connecticut. They began flying "Inshore Neutrality Patrol" operations on January 10, 1941.30 By then, however, construction activities at the naval air station itself were well underway.

NOTES

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 2 Ltr, CO/Newport to Ch/BuDocks, April 4, 1939, File NA 43, Vol. 1, RG 72.

 3 Ltr, Ch/BuAer to CNO, May 8, 1939, File NA 43, Vol. 1, RG 72; BuDocks routing slip, February 23, 1939, File NA 43/Al-1, RG 71; Ltr, SecNav to JAG, May 31, 1939, File NA, Vol. 6, RG 72.

4Ltr, Lt. Comdr. J. P. Whitney to Bates, June 21, 1939, File NA 43, Vol. 1, RG 72.

 5 Ltr, Adm Wm. D. Leahy to Sen. Green, April 28, 1939, File NA 43, Vol. 1, RG 72.

6Ltr, JAG to CNO, February 19, 1940, File NA 43, Vol. 1, RG 72.

7Ltr, BuDocks to JAG, September 18, 1939, File NA 43/N1-13, Vol. 1, RG 71; Ltr, Ch/BuDocks to JAG, March 27, 1940, File NA 43, Vol. 1, RG 72.

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 22 Ltr, BuDocks to CO/Newport, October 29, 1939, File NA 43, Vol. 1, RG 72.

23_{Ibid}.

²⁴Ltr, BuAer to Jenks & Ballou, November 24, 1939, File NA 43/A1-1, Vol. 1, RG 71; Contract NOy-3692, November 8, 1939, File NA 43, Vol. 1, RG 72.

²⁵Ltr, BuAer to C. A. Maguire, November 27, 1939, File NA 43/A1-1, Vol. 1, RG 71; Contract NOy-3763, December 13, 1939, File NA 43, Vol. 1, RG 72.

²⁶Telegram, Green to Moreell, December 6, 1939; Ltr, Moreell to Green, December 7, 1939, both File NA 43/Al-1, Vol. 1, RG 71.

 27 Ltr, BuDocks to Bureau of Supplies and Accounts, February 29, 1940, File NA43, Vol. 1, RG 72.

²⁸Ltr, BuAer to CO/Newport, October 29, 1939; Contract, January 8, 1940, both File NA 43, Vol. 1, RG 72; "History NAS Quonset Point, 1938-1944," pp. 4-5.

²⁹ FND History - Aviation, pp. 6-7; Ltr, Brow to Mitscher, October 4, 1940, File NA 43, Vol. 2, RG 72.

30 FND History - Aviation, pp. 6-8.

CHAPTER 4 Fundamentals of Naval Air Station Design

Since the design and construction of NAS Quonset Point is an example of standard base design concepts of the period, it will be useful to examine those elements of the naval bureaucracy that determined what facilities would be built and by whom and also the design concepts that influenced the plan of the base itself. The two bureaus most intimately involved with base design and construction were the Bureau of Yards and Docks and the Bureau of Aeronautics.

The Chief of Naval Operations and the Secretary of the Navy determined what facilities would be constructed and What features they would contain, subject to the approval of the President, the Bureau of the Budget, and Congress. The Shore Station Development Board established a yearly "Master Priority List," based on requests for new facilities from the Shore Station Development Boards of the various naval districts. The Shore Station Development Board consisted of representatives of all the bureaus and the Chief of Naval Operations and a secretariat. It reported directly to the Assistant Secretary of the Navy. The Board made plans and formulated longrange policies for developing and equipping naval shore establishments, including advanced bases overseas. Its detailed plans were often based on the recommendations of ad hoc boards or committees appointed by the Secretary of the Navy, such as the Rodman Board or the Hepburn Board. The Board had the task of coordinating the interests and requirements of the bureaus, of setting priorities for the programs, and of making budgetary recommendations to finance the programs. The CNO and the Secretary of the Navy chose projects from the SSDB list. Once Congress had provided the necessary authorization and funding, the Navy bureaus began their work. 1

An act of Congress of August 31, 1842 established the Bureau of Navy Yards and Docks. The Bureau shortened its name in 1862, dropping the "Navy" from the title. From its creation, BuDocks was responsible for the design and construction of all naval public works and naval public facilities. The BuDocks Planning and Design Department prepared plans and specifications for the construction of authorized projects. The Planning Division drew up general site plans and specifications and reviewed the work of local public works officers, other architects and engineers. The Aviation Facilities Division of the Construction Department worked with the Bureau of Aeronautics in site selection and planning, approved plans and estimates for BuAer, and supervised the construction of air stations.

The origins of the Bureau of Aeronautics have already been discussed, but a brief review is in order. Congress established the Bureau of Aeronautics on July 12, 1921 to consolidate and coordinate naval aviation activities carried on piecemeal since about 1910 by several separate offices, bureaus, and divisions within the Navy Department. The functions of the Bureau included aeronautical research and development, drafting recommendations and schedules for aircraft construction, supervision of the service, repair and salvage of naval aircraft, and managing shore

establishments and collaborating with the Bureau of Yards and Docks in their design and construction. BuAer determined what it needed; BuDocks designed and built the facility, subject to BuAer approval.

Within the Bureau of Aeronautics, the Public Works and Operating Facilities Sections of the Shore Establishments Branch, Maintenance Division served as liaison with BuDocks. These sections also examined outside proposals for airbase facilities and passed on their merits. Given the magnitude of new construction between 1939 and 1945 there was no shortage of outside advice, most of it apparently offered sincerely:

Your proposal to establish Finnish baths at Naval training centers has been carefully studied by the Flight, Training, and Medical Research Divisions of the Bureau of Aeronautics.

Finnish baths at pilot training centers may soothe the frayed nerves of certain individuals to the point where they could possibly finish the course. In view of the impossibility of setting up Finnish baths on aircraft carriers and tenders, it is believed that the individuals who are coddled through the course will probably become nervous casualities under the pressure of wartime operations.

The actual determination of site features at a given station was based on certain general policies, modified by special conditions or needs at individual locations. Quonset Point was designed from the outset to be a "Naval Air Station." As officially defined, this meant that Quonset Point would provide "operating, testing, overhaul, training and personnel facilities in accordance with the requirements of the Naval Aeronautical Organization." The Navy determined the composition of these facilities based on past experience and the recommendations of various boards and planning bodies. For example, Captain G. C. Westervelt suggested in May 1918 that a naval aircraft storehouse "should be a multiple story building with large elevators, and with modern handling devices, containing many thousand square feet of floor space." The Bureau of Ordnance provided a list of ordnance facilities that it felt would be the minimum necessary to serve the operational necessities of a naval air station, and collaborated with the Bureau of Yards and Docks on the design of a standard armory and magazines. 8

The Navy's preference for seaplanes for its long-range patrol aircraft also influenced the layout and equipment of naval air stations, as well, of course, as the location of these facilities. The principal ground equipment of World War II era naval air stations consisted of seaplane ramps, seaplane parking areas, seaplane hangars, landplane parking areas, landplane hangars, landplane runways, shops, schools, and personnel buildings.

Site criteria were based on the necessity for providing a limited amount of landplane facilities, alongside a protected body of water where seaplanes could land and take off under a reasonable maximum variety of weather conditions.

In 1920, Lieutenant K_{\bullet} B. Bragg described the ideal conditions for seaplanes as including:

. . . the shore of a protected body of water where wind and tide would permit operation on a 24 hour basis all around the year. A tract of water at least a mile square and not above two or three miles square was needed, with a depth of at least five feet at low tide and only a slight range in the tide, together with a beach of clear sand, sloping at a 10% grade and facing the prevailing wind. The land should be free from five to ten feet above high water, fairly level and hard and well drained.

In 1939 BuAer circulated a memo that outlined the general site requirements of a naval air station. The general location was to be strategically well-placed in relation to the other major naval air bases on the same coast, at or very close to an existing fleet base, and in an area that permitted year-round flight operations. By 1939 the seaplane requirements had been changed to include a three-mile-square landing area at least ten feet deep. Landplane runways were to be at least one mile long, with runways situated so that one could face the prevailing wind and another cross it at a right angle. Ideally, the landing field would be close to the waterfront "so that the same shops, storehouses and other common facilities will serve both carrier planes and seaplanes." This would simplify administration and be more economical.

BuAer also recommended that each naval air station provide berthing facilities for carriers, tenders, tankers, and supply ships. These facilities would include a channel thirty-five feet deep and 300-500 feet wide, a turning basin at least 2,000 feet square with tugs available to assist larger ships, and a pier or a safe mooring area, all in a protected location with slow currents and a minimum of heavy commercial traffic.

Since the ideal base would inevitably need ammunition, BuAer suggested that the ideal ammo storage area would consist of a well drained, isolated 400-acre site, at least 1900 feet from the main station, highways and channels. The ideal station would also be located in sanitary, healthful surroundings, in an area with a plentiful water supply, close to a major labor market, well supplied with civilian and military housing and served by a good highway network. Railroad connections were desirable but not essential. Finally, local weather would generally be free from excessive fog, rain, high winds, low ceilings, hurricanes, and temperature extremes. 13

A base that featured all these facilities would be expensive to construct, but the cost, unless extreme, was secondary to military considerations. If BuAer used these criteria to determine the value of planned or existing facilities, Quonset Point could only have been considered an ideal station, since as constructed it met or exceeded all these basic requirements.

Intelligent planning made it possible for the Navy to build Quonset Point in about twelve months, and it is worth noting that Quonset Point was only one of dozens of major construction projects underway at that time.

Workers at all levels performed prodigiously. The hightly trained cadre of specialists at BuDocks had done much of the design and planning before Congress had appropriated any funds, and layout and design standards were well established. The Washington office yielded much of its day-to-day decision making responsibilities to its field representatives, and an act of Congress made it possible for BuDocks to obtain assistance from private engineering and architectural firms when the Bureau felt that it needed help to maintain its work schedules. In the field, the cost-plus-fixed-fee contract, also authorized by Congress, allowed contractors to begin work immediately, secure in the knowledge that their profit was protected regardless of unanticipated construction difficulties. 14

The Navy, recognizing that its already overworked bureaus would be swamped by the extra design work required by the Hepburn Board's program, sought and obtained Congressional approval to secure outside design help. Before Congress, Acting Secretary of the Navy William D. Leahy stressed that the expansion of the Navy ashore and afloat necessitated field investigations and architectural planning for the new facilities. Leahy warned:

The expansion of the professional and engineering forces within the material bureaus of the Navy Department cannot be accomplished expeditiously. The current emergency shore construction program has demonstrated that neither the personnel nor the space required for their work can be obtained quickly.

The obvious alternative is to engage the services of private engineering and architectural firms or individuals to supplement the work of the Navy Department. In such manner the Navy could not only expedite the preparation of plans and specifications for important . . . building and engineering works, but could also obtain the services of the country's outstanding specialists. 15

As a result of these arguments, Section 3 of H. R. 2280, 76th Congress, 1st Session, "A Bill to authorize the Secretary of the Navy to Proceed with the construction of certain public works, and for other purposes," read:

Whenever deemed by him to be advantageous to the national defense, the Secretary of the Navy is hereby authorized to employ by contract or otherwise outside architectural or engineering corporations, firms, or individuals for the production and delivery of the designs, plans, drawings, and specifications required for the accomplishment of any Navy public works or utility project.

One organization the Navy turned to for help was the Detroit-based firm of Albert Kahn Associates, Inc., Architects and Engineers, a firm which had designed structures for the Army's Langley Field in 1917 and had done other aviation work in World War I. In 1940 the Bureau of Yards and Docks circularized the members of the American Society of Civil Engineers, the American Institute of Architects, and the Associated General Contractors, asking them to fill out questionnaires which would give the Bureau information

on experience, financial capability, personnel, and other qualification data. Although Kahn undoubtedly returned one of these questionnaires, his work was so well known and his qualifications so unimpeachable that the Navy felt confident to turn to his firm for help almost as soon as it realized that it needed assistance. Kahn's office designed a number of World War II era air stations for the Navy, including Quonset Point. 17

Kahn had developed an architectural idiom that was ideally suited to the operational demands of the industrial sections of a naval air station. In 1903, Henry B. Joy, Director and President of the Packard Motor Car Company, commissioned Kahn to design a 40-acre plant in Detroit. In 1905 Kahn designed Packard Motor Car Company's Unit No. 10. Departing from traditional heavy-timber-and-brick-mill construction, Kahn used reinforced concrete and steel sash for Unit No. 10. This design provided more natural light, more open space, and allowed for quicker, cheaper construction. In the 1905 Packard plant, Kahn had "defined the basic elements of the formula which produced an exceedingly simple solution to a complex problem - a solution based on an understanding of the possibilities of a revolutionary kind of standardized structure as well as the principles of economic production."18 This design provided the unobstructed space required by industry. It was readily adaptable to the requirements of an aircraft hangar. The basic modification, to steel frame with glass and metal curtain walls, can be seen in all the firm's best known industrial work, including Ford's River Rouge complex, and in the firm's World War 11 era hangar designs.

The Kahn office designed many government facilities during World War I, including air fields and a number of Navy bases. The government was pleased with Kahn's work, so it was natural that the Navy turned to him when air station plans became a top priority item. 19

Kahn recognized that speed was the essential element of the defense construction program. Utilitarianism was the key. Kahn noted, however, that this did not rule out attractive design:

Emphasis has been placed on the need for speed and little has been said regarding external appearance. Elimination of non-essentials and of all else save the purely utilitarian is imperative. In the very observance of these requirements, however, lies an element which itself makes for an attractive external effect . . . the direct and frank expression of the functional, the structural element of the industrial building automatically makes for impressive results. External beauty as such is never achieved by application of useless decoration, but rather by good planning, grouping, massing, and proportion. None of these need add to the cost of the structure or entail delays. Size itself is an important element in design. . . . It makes for grandeur and dignity in these mammoth structures. 20

Although Kahn's hangar design was under construction at the Neutrality Patrol facilities at the time, he became intimately involved with the Hepburn Board bases when the firm signed contract NOy-4382 in May 1941. For a fee of 3% of cost, based on 35¢ per cubic foot of living and operational space, 20¢

per cu./ft. for concrete storehouses, and 16¢ per cu./ft. for steel structures, Kahn agreed to:

. . . render all the services required in the preparation of sketches, designs, working drawings, specifications, detail drawings and specifications for structural work, sanitation, plumbing, sprinkler work, heating, ventilating, and electrical work, complete . . . 21

NO-y4382 involved work at Pearl Harbor, Kaneohe Bay, Midway, Sitka, Kodiak, and Unalaska. The Kahn office provided the same services at Quonset Point. The contract also included a clause that allowed the government to use the designs elsewhere. This helps to account for the similarity of most of the Hepburn Board bases.

The prevalence of standard, Navy-designed structures also explains the similarity of facilities. The Navy was forced to turn to Kahn and other civilian architects in 1940 when the press of work threatened to overwhelm the Bureau of Yards and Docks design sections. Before then, however, the Bureau designed structures for all naval air stations. There are many instances where the Bureau of Aeronautics forwarded its approval of BuDocks designs for airbase facilities. For example, on January 2, 1932, BuAer noted its approval of BuDocks designs for barracks, messhall, administration, dispensary, general storehouse, laundry, refrigeration plant, commissary store, maintenance shop, garage, and fire station buildings for NAS Sunnyvale, California. 23

Although BuDocks architects were forced to conform to general design parameters, they did have some room to exercise architectural creativity, especially in exterior design. Frequently the Navy architects made a conscious effort to design major structures that would reflect regional architectural styles. At NAS San Diego, for example, this trend is most clearly visible in the Administration Building and the early barracks, both of which clearly show Spanish influence in their design. By World War II, however, civilian and Navy architects were forced to downplay creativity and to design structures that could be erected quickly and cheaply. Thus, external ornamentation gave way to plain, standard designs. This is not to imply that the World War II bases lacked all aesthetic value. Subjectively, the architectural simplicity of the designs could be pleasing in its own right. However, there was a great deal of design similarity apparent in the bases as a group. 24

The primary reason for these attempts to eliminate external ornamentation or design "frills" was the desire to conserve labor and materials. In the spring of 1940, the Bureau of Yards and Docks promulgated a set of guidelines for new design and construction that was intended to conserve scarce construction materials and manpower. The War Production Board, the Secretary of War and the Secretary of the Navy incorporated the BuDocks guidelines in a "Joint Directive on Wartime Construction," issued on May 20, 1941. The directive specified that buildings were to be no more elaborate or expensive than was absolutely necessary and that whenever possible substitutes were to be found for scarce materials. Kahn had to conform to these guidelines when he designed Quonset Point facilities.

Most of the standard Navy designs used at Quonset Point and at other World War II era bases date from the 1930's. As the Bureau of Aeronautics debated naval air station plan characteristics, Commander E. L. Marshall's Design Department of the Bureau of Yards and Docks developed many of the standard structures seen at Quonset Point and other contemporary air stations. At Quonset Point, Marshall's Design Section's work can be seen most clearly in the warehouse complex, especially Buildings 16 and 17. Both designs evolved throughout the 1930's. The factor that most significantly influenced the design of these structures was the need to accommodate standard 48" x 48" pallets and their handling equipment. Doors, elevators, aisles, etc., had to conform to the geometry of these pallets. Other standard designs were drawn to meet specific requirements for ammunition and food storage and the like. 26

Even though base plans and structural designs originated in the BuAer/BuDocks design departments, there were those who found reason to criticize the lack of standardization at aviation shore facilities. In 1946 the "Informal Committee to Review Aviation Logistic Planning and Administration During the War," the McClure Board, (Captain W. H. McClure presiding) noted that there was still too little standardization of the shore establishment and that the layouts and buildings were too frequently the result of planning for that station independently of other stations. the Board apparently failed to consider was that geographic and climatic conditions made it virtually impossible for the Navy to design one base plan and one set of standard structures that would be suitable for all locations at all times. It seems that there was in fact a very high degree of design standardization at the World War II bases. The demands of the war made it essential that the Navy produce general base plans and structural designs that could be constructed anywhere in the world with a minimum of delay and at a reasonable cost. These basic designs were modified to conform to local conditions, but the essential common design features remain.

The design and construction of Quonset Point shows all of these influences at work. The base plan met all the requirements as set forth by the Navy in the 1930's, but it is of course site-specific, conforming to the geographic pecularities of the Quonset Point site. Base structures were erected directly from standard Navy plans, from local modifications of standard plans, or from plans drawn specifically for Quonset Point by architects engaged specifically for the project. As the decision to build the base at Quonset Point reflects the culmination of a variety of strategic and political decisions, so too does the plan and construction of the base itself reflect the influence of numerous design requirements and sources.

NOTES

IDavis, "BuAer XI," pp. 2, 21-22.

²Richard G. Wood, "Preliminary Inventory of the Records of the Bureau of Yards and Docks," National Archives Preliminary Inventory No. 10, 1948, p. 1; BuDocks, Building Bases, pp. 1, 65-66.

³National Archives, "Registration of Record Group 72, Revision 5, August 9, 1968; Davis, "BuAer XI," p. 18.

⁴Davis, "BuAer XI," pp. 18, 66-67.

⁵Ltr, Ch/BuAer to Lt. Com. J. J. Tunney, USNR, June 23, 1941, File NA, Vol. 7, RG 72.

⁶Definition of Terms, CNO memo, June 1, 1944, in Davis, "BuAer XI," p. 433.

 7 Ltr, Westervelt to Bureau of Construction and Repair, May 18, 1918, File NA, Vol. 1, RG 72.

 $^{8}\mathrm{Ltr},$ Com. A. C. Scott to Ch/BuOrd, September 26, 1918, File NA, Vol. 2, RG 72.

9 BuDocks, Building Bases, p. 278.

 $^{10}\mathrm{BuAer}$ Memo, February 21, 1939, File NA, Vol. 5, RG 72.

11Spencer."DCNO (Air), XI," pp. 228-229.

12 Ibid.

13_{Ibid}.

Popular Aviation, "Special U.S. Naval Aviation Issue," Vol. XXX, No. 1, January 1942, p. 196.

 15 Leahy to Speaker, House of Representatives, January 19, 1939, "Hearings on H. R. 2880," No. 18, pp. 1-2.

16 Ibid., p. 49.

17 BuDocks, Building Bases, p. 85.

Practice, Albert Kahn and Associates, Architects and Engineers (Princeton, N.J.: The Newcomen Society, 1970), pp. 13-15. Also see W. Hawkins Ferry, et al., The Legacy of Albert Kahn (Detroit: Detroit Art Institute, 1970).

- 19 King, Creative, pp. 16-17.
- ²⁰Albert Kahn, "Architecture in the National Defense Building Program." Michigan Society of Architects <u>Weekly Bulletin</u>, No. 52, December 30, 1941, p. 52.
 - 21 Contract NOy-4382, File NA, Vol. 7, RG 72.
 - 22 Ibid.
 - 23 BuAer to BuDocks, January 2, 1932, File NA, Vol. 5, RC 72.
 - ²⁴Sudsbury, <u>Jackrabbits</u>, p. 49.
 - ²⁵BuDocks, <u>Building Bases</u>, pp. 13-14.
- $$^{26}\rm{Ltr}$, E. L. Marshall to Lt. Com. Moss, July 20, 1940, File NA 43, Vol. 1, RG 72.
 - ²⁷Davis, "BuAer XI," pp. 256-259.

CHAPTER 5

The Construction of NAS Quonset Point July 1940 - July 1941

By the end of June 1940, the stage was set for the beginning of construction activity at Quonset Point. The Navy owned the land, funds were available, and the design and construction team was ready to begin work. The years of planning and discussion were about to pay off, as a highly skilled Navy/civilian team prepared to construct the long awaited northeastern airbase.

As soon as the funds allocated by the First Supplemental Defense Appropriation Act, 1941, became available, the Navy and various local and regional interests set about trying to choose or be chosen as one of the construction contractors at Quonset Point. Politics played a major role in this process — Senator Green usually pushed firms with ties to the Democratic Party, while Governor Vanderbilt suggested "Republican firms." Green was generally more successful than others in obtaining contracts for his favorites. One of Green's preferred tactics was to remind President Roosevelt of his unswerving support of Roosevelt's New Deal programs and to point out the occasional political lapses of Green's adversaries. When Roosevelt recommended firms they were frequently the ones suggested by Green.

Construction and site preparation activities began at Quonset Point before the \$25,000,000 in construction funds became available. Recall that work on the Neutrality Patrol facilities was continuing apace. This work, performed under BuDocks contract 17X1363, was not completed until March 1941. By then, a major airbase had sprung up around the temporary facilities. 2

Even as late as June 1940, BuAer/BuDocks construction teams had to watch virtually every penny they spent. For example, BuAer had authorized \$15,000 for test piles, surveys, and borings at Quonset Point. The low bid for this work was \$14,325, from the Raymond Confete Pile Company of New York City. BuDocks asked BuAer if it could keep the extra \$675 as a contingency fund. BuAer said no; BuDocks could have the \$14,325, but if they needed or wanted more money the would have to ask for it through normal channels.

The Supplemental Appropriations Act passed in June 1940 allocated \$24,204,000 to Quonset Point. BuAer decided that it would spend the money on the following facilities:

Table 1 Quonset Point Funding Breakdown

Item
Additional land
Dredging, filling, bulkhead
Grading

Amount \$ 500,000 4,320,000 400,000

| Improvements at Outlying Fields 300,000 Pier 1,000,000 4 Landplane hangars 900,000 Runways and warm-up areas 1,450,000 1 Seaplane Hangar 500,000 2 Seaplane Ramps 140,000 Seaplane parking 400,000 Barracks and mess (2,000 men) 1,600,000 20 officers quarters 268,000 Bachelor Officer's Quarters (150 men) 450,000 20 Married enlisted men's quarters 160,000 Enlisted recreation facility 350,000 Officers recreation facility 200,000 Bakery building and equipment 100,000 Laundry building and equipment 100,000 A & R shop 1,400,000 Engine test stands 60,000 Garage and firehouse 60,000 Station maintenance shop 80,000 Power plant building and equipment 500,000 Heat distribution system 500,000 Electric distribution system 75,000 Fresh water and fire protection system 450,000 Sewer and drainage system | Land for outlying fields | 400,000 |
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| Contingency funds 3,086,000 | • | |

Now that BuDocks knew exactly what BuAer wanted at Quonset Point it could begin selecting contractors and awarding construction contracts. BuDocks produced an approved site plan and began discussions with proven contractors.

The Bureau of Yards and Docks turned to an established construction company, the George A. Fuller Company of New York City, as its first choice as prime construction contractor. In mid-June 1940 Fuller representatives met with BuDocks officials to discuss Navy requirements and procedures and to examine in detail the work to be done and the firm's ability to accomplish it. On June 30, 1940, Admiral Ben Moreell of the Bureau of Yards and Docks met with Fuller President Lou R. Crandall and advised him that the Navy had chosen the Fuller Company to be one of the two prime construction contractors. The other firm chosen was the Merritt-Chapman & Scott Corporation, also of New York, which specialized in heavy and maritime construction.

The Navy, Fuller and Scott signed the main Quonset Point construction contract, NOy-4175, on July 12, 1940. Construction began immediately. The most important sub-contractors were the J. L. Murphy Company, New York, plumbing and heating systems; Hatzel and Buehler Company, New York, electrical; and the Anderson Company, Providence, sheet metal work. The two prime contractors, George A. Fuller and Merritt-Chapman & Scott, brought together for the first time for the Quonset Point project, continued to operate together as the "East Coast Contractor" for the rest of the war. The Navy turned to them for many construction and supply projects throughout the war, including design and fabrication of the original Quonset Huts, designed and produced by this team at Quonset Point and on adjacent land later to become the Davisville Construction Battalion Center.

Fuller's project manager, Walter Hammer, arrived at Quonset Point on July 1, 1940. Commander Raymond V. Miller of the Navy's Civil Engineering Corps was the "Officer in Charge of Construction" for the Bureau of Yards and Docks. Dan McGorrisk served as Fuller's General Superintendent. These three men quickly established a smoothly functioning professional relationship, a fact which undoubtedly helped to speed construction at Quonset Point. They worked so well together, in fact, that when Miller retired after thirty years in the Navy in 1951 he immediately went to work for the Fuller Company in New York.

The Fuller engineering-design department set up its offices in the old National Guard Dispensary building, now designated Building 435 at Quonset Point. This office existed chiefly to adapt certain structural and mechanical designs of standard Navy structures already erected at other stations. However, the contractors also needed new designs for special types of buildings and utilities. For this reason the Navy engaged two architectural firms, Albert Kahn and Associates of Detroit and Gibbs and Hill, Inc., of New . York. Besides the Neutrality Patrol hangar, the Kahn organization designed the Administration Building (Bldg. 7), the Civilian Cafeteria (Bldg. 15), the Dispensary (Bldg. 8), the Enlisted Barracks/Mess Hall complex (Bldgs. 41-56), the Officers and Enlisted Recreation facilities (Bldgs. 12 and 11), and the Gatehouse (Bldg. 10) specifically for Quonset Point. Gibbs and Hill contributed plans for the electrical and steam distribution systems, the Power Plant (Bldg. 64), Laundry (Bldg. 65), Cold Storage and Commissary (Bldg. 14), and modified the Assembly and Repair Shop design from existing plans developed for the Jacksonville base.

Construction activities at Quonset Point poured \$500,000 per week into the local economy. Contractors hired some 12,000 construction workers and rural communities around the site boomed overnight. The sudden influx of workers created problems, however. Workers could find food, drink, and entertainment with relative ease, although shops and restaurants were invariably crowded. Transportation was available, but getting on the base at shift changes was a major undertaking [HAER-58-59]. It was virtually impossible to find housing in the area. Newspapers reported that even staid old families were taking in construction workers as borders. These problems did not delay the course of construction at Quonset Point, however.

Although local officials occasionally expressed concern over the contractors' hiring and firing policies, labor problems never delayed work at the base. Rhode Island Governor William Vanderbilt's main concern was to insure that contractors hired as many local men as possible. He made comments along these lines to the Navy several times, although the Navy always replied that it had no say over the contractors' hiring and firing policies. A statement by Senator Green that Quonset Point construction would be a great boon to the Democratic Party elicited a howl of protest from Vanderbilt, a Republican. He urged that the Navy select construction workers from the state unemployment files to completely circumvent any charges of favoritism. Once again, the Navy refused to take the action he requested.

Joseph T. Cahir, Rhode Island's Deputy Director of Labor, complained to the Secretary of the Navy that the Contractors were not paying the legal minimum wage to carpenters (\$1.17 /2 hr.). Secretary Edison turned the problem over to BuAer, which investigated the charge. BuAer, once again showing reluctance to become involved in a contractors' personnel problems, said that the contractor would pay the minimum wage, "or so we believe." 13 Eventually the Navy acted to prevent problems like this from delaying construction at wartime projects. On July 31, 1941, the General Contractors Association, the major construction trade unions and the Navy announced the "Building Trades Stabilization Agreement," which established that regional wage rates would prevail in contracts, that these rates would hold for one year or the duration of the contract, that workers would be paid time-and-a-half for overtime and for work on Saturdays, Sundays, and holidays. In return, the unions agreed not to strike. 14

NAS Quonset Point Facilities

To facilitate a discussion of the structures erected at Quonset Point between roughly July 1940 and July 1941, it will be useful to deviate somewhat from a largely chronological narrative. Generally speaking, all the activities described in the remainder of this chapter occurred simultaneously. Much of the design, construction, and specification information discussed below was gleaned from the architectural drawings currently stored in the basement of Quonset Point's Administration Building. Approximately 100 of these drawings have been photocopied by the Historic American Engineering Record. These form part of the set of 278 photos that

serve to illustrate this report. Much design information was drawn from Quonset Point's National Register of Historic Places Inventory Nomination, compiled by David Chase, Deputy Director of the Rhode Island Historical Preservation Commission, in July 1978. Although these two sources are not generally mentioned in the footnotes, they proved to be an invaluable source of information.

To further aid in the rational presentation of this material, the structures have been grouped into broad general categories according to function. The Navy expected a naval air station to provide facilities for the operation and maintenance of naval aircraft, and for the training and subsistence of base personnel, civilian and military. Quonset Point buildings have been assigned to one of the following functional categories: operations, overhaul, administration, and personnel services. Another category, transportation, includes a discussion of the road, railroad, docking, and public utility facilities. HAER No. RI-15-66, a copy of the BuDocks base plan, and HAER No. RI-15-136, a map dated June 30, 1941, provide relatively clear views of the facilities erected at Quonset Point during the initial surge of construction activity. The reader may with to keep either or both of these views near at hand to illustrate the work described below.

A) Site preparation and Transportation Facilities

The most immediate and pressing problem facing the Quonset Point contractors was that of land clearance. The site had to be levelled and graded, but before even that basic work could be done, workers had to move or raze the 300-odd houses that comprised the Quonset Point summer colony. A team of Fuller architects and engineers surveyed the buildings to determine which were worth saving. About 275 cottages were salvaged, dragged from their original sites by bulldozers and used elsewhere for enlisted and officers housing and for a large civilian housing area adjacent to the base later titled Kiefer Park. To prepare them for this function, many of the cottages were extensively enlarged, modified, and modernized. The eventual fate of these cottages will be discussed in more detail in the personnel services section (Section E).

While Fuller employees were busy moving the summer cottages, Merritt-Chapman & Scott workers began the dredging and landfill operations the Hepburn Board had determined were necessary to provide the extra land and to improve the water-borne access to the base. Five dredges, together with support vessels, arrived from various points along the east coast and immediately set to work to widen and deepen the ship channel and to carve a turning basin out of the mud of Narragansett Bay. The waste material removed from the bay flowed through steel pipes to fill in behind the newly completed bulkhead. The effluvium accumulated behind the bulkhead and became, in time, more than 400 acres of hardpacked ground. The outline of this new terrain is readily visible on the base maps, since for the most part the runways are situated on this hydraulic fill. In the process of creating the new ground, the contractors obliterated the landform that gave the station its name: Quonset Point is no more, buried beneath the rock and asphalt at the southern end of runway 16-34, the base's main runway.

It is perhaps inevitable, when describing a major military post like Quonset Point, that one draws the analogy that the base was effectively a small city, constructed to provide its inhabitants with a variety of municipal services. Despite the intimate relationship between the base and the surrounding communities, it had the facilities to become a self-supporting town, complete with its own police and fire protection (Building 407), gasoline service station (Building 395) and power and sewage treatment plants.

Buildings 395 and 407 have no special interest, but constructing the power plant (Building 64) was a major construction project, intended to make the base less dependent on local utilities for its power. Building 64 is a three-story, steel-frame structure, clad in asbestos-protected metal siding. Although the outline is irregular, the maximum dimensions are $118' \times 66' \times 59'$ (L x W x H, the pattern to be followed when dimensions are cited). Designed in 1941 by Gibbs and Hill, the 25,569 square foot structure housed two (later three) boilers that generated steam for electricity and heat. Planners routed the utility pipes and wires through underground conduits that reached all the base's main buildings.

The sewage treatment plant (Building 66) is a small facility, consisting of a 2,800-square-foot treatment building plus several concrete sludge tanks and filter beds. The complex was not, it appears, meant to provide any more than basic treatment of the base's waste products. Exact figures are not available, but it is likely that the complex effectively treated no more than a small percentage of the total sewage output.

The base's only significant link to the regional road net was what is today Roger Williams Way, which runs from the Main Gate northwest for about two miles until it reaches U. S. Route 1, the Post Road, the main north-south arterial on the east coast in the days before the construction of the superhighway net. A rail spur was constructed just off the western shoulder of the road, linking the base with the New York, New Haven and Hartford main line at Davisville. The road and rail lines both enter the base at the Main Gate. Roger Williams Way becomes Quonset Road, the base's principle thoroughfare, which runs southeasterly to its southern terminus at the pier. The railroad parallels Quonset Road, running directly to the pier with sidings branching off at First Avenue to serve the power plant, laundry, and sewage treatment plant, and Fourth Avenue, serving the A & R shop and the warehouses. Initially, the railroad crossed the Post Road at a grade crossing, but, pursuant to its agreement with the state, the Navy built an overpass to carry Post Road traffic over the rail line.

The pier (Structure 495) gave Quonset Point yet another transport connection. Built of steel and concrete over hundreds of steel piles, the 1172×80 foot structure, finished in 1942, is equipped with gasoline and diesel fuel lines and electrical connections to facilitate work on the aircraft carriers and other vessels that visited the base. The pier could accommodate two full-size carriers simultaneously, and before the base closed, virtually all of the Navy's best known carriers had tied up at the Quonset Point pier.

QUONSET POINT NAVAL AIR STATION HAER NO. RI-15 Page 54

Quonset Point represents a successful attempt to integrate road, rail, sea and air transportation systems. The transportation network on the base was simple, utilitarian, and highly efficient for the most part, although the long lines of cars waiting to enter the base at rush hour attest to the problems caused by providing only one highway route on to and off of the station. The transportation net was well-planned to support and service the facilities that constituted the air station proper.

B) Administration

The surface structures at Quonset Point are arranged according to a complex but rational plan that can be described schematically as a rectangle with an east west long axis divided diagonally into quadrants. Saratoga Street and Ranger Avenue define the approximate western limits of this quadrilateral. Two 4000-foot, bay-side runways mark the north and east sides. Narragansett Bay forms a natural southern boundary. Forth Avenue and Wasp Street divide the rectangle into functionally distinct quadrants. The west quadrant is devoted to domestic and administrative facilities. Industrial activities take up most of the southern quadrant. The landplane airport fills the north and east quadrants. All the buildings are oriented parallel or perpendicular to the roads, except for the buildings in the warehouse complex which are ranged diagonally to the road system to accommodate the railroad sidings that serve them.

The administration facilities comprise the smallest group of structures to be discussed in this chapter. Building 7, the Administration Building, is, as its name implies, the core of the base control facilities. This building, designed by Kahn and built in 1940-41, housed virtually all the base's administrative offices, from that of the commanding officer down the chain of command. The Administration Building is a two-story, flat-roofed structure, 196' x 46' x 26'. The exterior is clad in brick veneer over a plywood-sheathed steel frame, with ribbon windows and spare copper trim. Building 7 provided 44,203 square feet of office space.

The other main administrative building is the Gate house, Building 10. Situated at the main gate, where Roger Williams Way becomes Quonset Road, Building 10 was also designed by Kahn specifically for Quonset Point. During its days as an active military base, Quonset Point remained closed to the public, so Building 10 served a vital security and screening function. Building 10 is a one- and two-story structure, constructed in the same brick-over-plywood-over-steel structural system as Building 7. The off-base side of the L-shaped structure incorporates a curved bus depot and a taxi stand. Due to the relatively isolated location of the base, hundreds of persons used this depot daily on their way to and from their work or duty station.

A number of other small structures housed the equipment necessary to maintain the base itself. The base is "littered" with a number of Public Works Department garages and shops, although most of these facilities are clustered on Quonset Road between Second and Fourth Avenues. Typical of these shops are Building 13, 59, 414, and 487. Buildings 13 and 59 were erected in 1941 from Kahn plans for similar structures at NAS Kodiak, Alaska. Both are of steel-frame construction, clad in asbestos-protected metal siding, and both provide approximately 20,000 square feet of storage and shop space. Buildings 414 and 487, built from standard BuDocks plans, were constructed of concrete blocks. They provide roughly 16,500 square feet of working space.

These few administrative structures effectively controlled the pace of daily life at the station, and were essential to the efficient operation of the other facilities. All the administrative structures remain in use as of this writing.

C) Operations

Quonset Point's primary role as a naval air station was to support and maintain the aeronautical element of the United States Navy. To this end the base needed a variety of structures designed and situated specifically to provide access and support to naval aircraft, both landplanes and seaplanes. The operational roles and functions of NAS Quonset Point changed somewhat over time, but these changing roles invariably required facilities of a highly specialized nature. These structures are among the largest and most easily recognizable structures on the base.

The operational existence of the naval air station centered around its runway and hangar complexes. These facilities occupy the seaside perimeters of the base. Seaplanes used a water takeoff and landing area in Narragansett Bay. Landplanes came to or left the station on one of four runways laid down during the earliest days of construction. The base's main runway, 16-34, runs northwest-southeast at the eastern edge of the base complex. As originally constructed, the runway was 200 feet wide and 6000 feet long. A secondary runway, 5-23, crossed the main runway at roughly a 60 degree angle, not the ideal right angle crossing but laid out so as to face the prevailing winds in the summer. Runway 5-23 is 4000 feet long and 500 feet wide. Two other 4000-foot runways run along the north-south and east-west bulkheads.

For the most part, the runways are built on the hydraulic fill laid during the dredging operations of 1940-1941. They are laid on a fill of coarse sand and a six-inch subgrade of rolled gravel. The runway surface is asphalt, laid in two tiers, three inches topped by a 1 ½ inch layer. The runways were painted and marked according to Navy standards. On December 23, 1940 Commander Harold J. Brow piloted the first plane, a Grumman JF-1 Amphibian, to land on the still unfinished runways at Quonset Point.

Among the largest individual structures on the base are the three seaplane hangars, Building 1, 2, and 406. Building 2 is the first Navy building constructed at Quonset Point, the Neutrality Patrol hangar that predates the air station proper. This structure was designed by the Kahn organization in late 1939 to house the Navy's PBY patrol aircraft. The superstructure is steel frame, clad in glass, as bestos and corrugated sheetmetal siding. The aircraft storage space measures 320 feet wide and 32 feet high. Modified, twelve-panel Howe trusses support the roof. Access to the work area is provided through ten, thirty-foot-high doors that roll back into pylons at the corners of the building. The slightly sloping roof carries a pair of triangular sky-lights parallel to and set back from the long elevations. The overall dimensions of the building are 238' x 321' x 47'.

Two, two-story lean-tos, each 238' x 27', provide office and storage space. Fuller/Scott copied the Kahn design when they drew up plans for the two seaplane hangars that flank Building 2 -- Building 1 in 1941 and Building 406 in 1942. They are in virtually all respects identical to their neighbor. A projected fourth hangar was never built. A seaplane control tower, mounted atop Building 2, disappeared shortly after World War II.

The Landplane Hangars, Buildings 3, 4, 5, and 6, are essentially smaller versions of the seaplane hangars. These buildings measure 200' x 202' x 38', with two, two-story lean-tos 200' x 26'. Each provides approximately 64,500 square feet of floor space. (By contrast, each seaplane hangar encompasses about 107,600 square feet of floor space.) The design used at Quonset Point came from Kahn plans for landplane hangars erected at NAS Kodiak, approved in July 1940. The plans were apparently used without modification, suggesting the "standardized nature of the design" as well as the "time constraints that shaped the approach to base construction in this era of rapid mobilization." The landplane hangars were constructed in the same steel-frame, glass-curtain-wall idiom as the seaplane hangars. [HAER 22-25, 75-76, 182-190] All the hangars were connected to a standard gasoline storage and distribution system.

Air traffic controllers located in Building 61, the Aviation Operations Building, directed all flight operations at Quonset Point. Building 61 design came from Kahn's drawings for the control tower at NAS Jacksonville, modified by Fuller/Scott architects for Quonset Point. flat-roofed, reinforced concrete structure is dominated by its three-story, corner control tower. The tower's banks of windows are shielded by cantilevered "anti-splinter" hoods. Navy personnel in Building 61 planned the patrol missions and dispatched aircraft to investigate suspicious "Bogeys" that appeared periodically. Building 61 also housed the radar and radio room and other communication facilities. Teletype circuits linked Quonset Point with Newport, Boston, and New York City; command telephone lines connected the above with each other and with various Army and Navy intercept and patrol stations. This system made it possible for Quonset Point to talk with Coast Guard, Army, and Navy bases all along the East Coast, from Halifax to Key West. More routine communications went through two conventional phone lines. The "Green Line" was an on-station restricted use command line.

Medium and long range wireless communications passed through Building 58, the Radio Transmission Building and towers. The transmission building (one story, 82' x 32' x 21') housed several powerful and sensitive transmitters and receivers. Fuller/Scott architects executed the actual design from Kahn plans for a similar facility at NAS Kodiak. Kahn's work was based on general design requirements set by the Navy in mid-1939.

The logistical requirements of war time combat operations made it essential that Quonset Point have facilities to store and prepare various kinds of small arms and air-to-ground munitions. For "bulk" storage of munitions Quonset Point used facilities on Hope Island, about two miles from the base in Narragansett Bay. The facilities on Hope Island consisted of a number of standard design, high explosive magazines, all of earth and concrete construction, 51' x 27' x 12'. On the base itself, several small arms (Buildings 97-98), pyrotechnic (Buildings 99-100) and smoke drum magazines (Buildings 101-102) housed the ready ammunition supply. Fuller/Scott designed these buildings, as well as the two inert storehouses (Buildings 103-104) which housed practice bombs, torpedoes, and the like.

These structures housed the operational activities of the base. Another large complex served the overhaul and storage operations that were as much a part of the history of Quonset Point as the aerial operations.

D) Overhaul and Storage

The centerpiece of Quonset Point's overhaul operations was the Building 60 complex, initially called the Assembly and Repair Shop. The operations of the A & R Shop will be discussed in detail in the next chapter. The focus here is on Building 60 itself, a six-acre complex of shops and work areas.

Building 60 is mostly a steel-frame, glass-curtain-wall structure, although the administrative offices are housed in a reinforced concrete wing on the Third Avenue side of the building. Plans for the structure came from Atlanta's Robert and Company. The design was originally developed for the A & R Shop at NAS Jacksonville; Gibbs and Hill revised the plan for use at Quonset Point.

Building 60 is actually a number of adjacent, interconnected structures. The largest of these is the "Large Hangar," used for aircraft assembly and disassembly. The hangar has a 160-foot clear span and 45 feet of headroom, some of which is occupied by a number of overhead cranes and hoists. Numerous singlestory appendages house most of the actual work space. Although the structure has been greatly modified over the years, its original dimensions were 1212' x 634' x 75'. This provided almost 600,00 square feet of work area.

Buildings 16 and 17, the General Storehouse and Aircraft Storehouse respectively, were the two original components of the warehouse complex that occupies most of the block bounded by Third Avenue, Fourth Avenue, Lexington Street, and Leyte Street. Building 16, the General Storehouse, is the larger of the two. This structure was adapted by Fuller/Scott architects, working from standard Navy plans. A three-story structure, 483' x 142' x 40', Building 16 was designed for use with the newly developed forklift and standard 4' x 4' pallet. These requirements influenced the dimensions of the building's structural bays, ceiling heights, corridor widths, and the like. The building is constructed of reinforced concrete with mushroom columns and

concrete floors. Rail sidings serve both long sides of the building, with loading docks sheltered by cantilevered concrete canopies.

Building 17 is a single-story structure designed to house aircraft parts. Of steel-frame and corrugated steel-metal construction, it measures 526' x 123' x 50', with 43,900 square feet of floor space. This design was also executed by Fuller/Scott architects from standard Navy plans developed in the 1930's.

The Navy also built a number of smaller, specialized structures to house limited storage and maintenance operations. Building 20, the Torpedo Storage and Repair Shop, is typical of these structures. Building 20 is a small (61' x 31' x 18') steel-frame structure located close to the landplane hangars. The Torpedo Shop is of special interest because of the insight it gives into Navy design procedures. BuAer seems to have accepted most BuDocks designs with few complaints, but when it was dissatisfied BuAer was not reluctant to "suggest" changes. The original design for the Torpedo Shop was developed by BuDocks for NAS Kodiak, Jacksonville, et al. E. L. Marshall, the Aviation Project Manager, sent the plans to BuAer's Captain Marc A. Mitscher for approval. Mitscher suggested a number of substantive design changes, including relocating the storage, office, and restroom areas, to "provide better lighting in the workshops." Quonset Point's Building 20 incorporates these design changes.

E) Personnel Services

If one considered numbers alone, the housing and personnel services facilities at Quonset Point would be the most important part of the base. Although these buildings were not directly involved with the operational specialties of the base, they obviously played a vital role. Performance and readiness are contingent, in part, on morale, and high morale depends, in part, on the quality of living and recreational facilities on base. Quonset Point offered its occupants a broad range of housing possibilities and recreational diversions. Other personnel services facilities fulfilled health care and subsistence needs.

The Enlisted Barracks Complex, Buildings 41-56, dominates the center of the base. This vast complex of fourteen corridor-connected, two-story, flat-roofed buildings contains a mess hall, bakery and brig in its center. The brig is a small one-story structure located behind the bakery. (Bldg. 56, The Kahn organization designed the complex in 1940, and the buildings

The Kahn organization designed the complex in 1940, and the buildings have the recurrent brick-over-plywood-over-steel-frame structural system used for all the other Kahn-designed domestic and administrative buildings at Quonset Point. Each of the two-story dormitory wings measures 182' x 46' x 26'.

The Mess Hall and Bakery (Bldg. 55) which dominates the center of the housing block is a one-story structure, 302' x 345' x 24', that houses the cooking and serving facilities for the complex. Its exterior design is similar

to the barracks that surround it. Long corridors connect the barracks buildings to the mess hall. Originally the permanent complex was to be twice as large. The needed extra housing space was provided by Type Bl-B Barracks buildings discussed in Chapter 6.

Initially, the Navy constructed only minimal on-base facilities for married enlisted men. A small number of the Quonset Point summer colony cottages were moved and renovated for this purpose (Bldgs. 21-40). Fuller/Scott architects redesigned many of the structures in 1940-1941. The size of the buildings varies from one to two stories, but all are single family homes. They provide an average of 1500 square feet of living space per dwelling. These buildings flank Lexington and Exeter Streets on the base's western boundary. Eventually these structures became Chief Petty Officers' Housing.

The Enlisted Men's Recreation Complex (Bldg. 11) is located opposite the Enlisted Barracks on the north side of Fifth Avenue. Designed by the Kahn office late in 1940, this structure has a brick veneer exterior accented by cast concrete trim at window and door openings. A large two-story building, it housed a gym, a theatre, a soda fountain, lunch counter, bowling alley, a small library, a tailor shop and a shoe repair shop. Quonset point requested \$38,500 to equip the facility but BuAer provided only \$8,600, informing Quonset Point that it would not fund profit—making ventures with government funds. BuAer told Quonset point to borrow the necessary funds from the "Ships Services" department of another station. Quonset Point eventually obtained its money from an unknown outside source.

The Bachelor Officer's Quarters complex (Bldg. 9) is a large, multi-unit building in brick veneer with concrete trim. Yet another Kahn design, it provided private or semi-private rooms to single or visiting commissioned officers. The three-story entrance block is faced with three recessed, three-story windows incorporating the entrance doors themselves. A single-story mess hall flanks the entrance block. The monumentality of the main elevation results from the simple, large-scale, clearly articulated units that comprise it and the placement of the building on a low podium fronted by a broad, flagstone-paved terrace.

The base's senior officers lived in close proximity to each other in the Senior Officers Quarters, Buildings A through T. These twenty structures were once simple summer cottages. They were moved from their foundations and resited to form a tight cluster of buildings set off from the rest of the base. They were ranged along two streets, Glenn Curtiss Drive and Orville Wright Drive, which meet at an oval green. Glenn Curtiss Drive was laid out as a boulevard with a median strip terminating at the green. The long axis of this oval, continuing the line of Glenn Curtiss Drive, led to the base commander's residence, Quarters A. Originally built in the vernacular bungalow style, Fuller architects completely redesigned the structures to achieve a more harmonious "Colonial" or "Federal" appearance, more suitable to the rank of the new inhabitants. All the structures are one-and-a-half- or two-story, single-family dwellings. Lou R. Crandall, president of the George A. Fuller Company, wrote of these houses:

This group of houses is carefully planned. The houses, no two of which are alike, were enlarged and modified until they achieved a pleasant harmony, and placed on an ellipse on the higher ground, well away from the hangars and runways. To the largest of them, which was to be the home of the commanding officer, was added a "widow's walk," one of those quaint lookout towers that crown the top of many a New England sea captain's home. When the lawns were seeded and fine old trees transplanted from an adjoining woods, these quarters became the envy of officers from other naval stations.

The centerpiece of the complex is Quarters A. It is the largest (6,585 sq. ft.) and most impressive of the dwellings. This home was sited, at BuDocks orders, to provide a good view and pleasant surroundings. The other homes were roughly equivalent in quality, although less roomy (about 3500 sq. ft. on the average). The order in which these houses were assigned gives some inkling as to the unofficial "pecking order" on the base:

Table 2 Senior Officers Housing Assignments

| Quarters | Α | Commanding Officer, NAS |
|----------|---|-------------------------------------|
| Quarters | В | A & R Officer |
| | | ' |
| | C | Senior Medical Officer |
| | D | Executive Officer, NAS |
| | E | Chief of Supply, ComFair |
| | F | Supply Officer |
| | G | Public Works Officer |
| | Н | Assistant Public Works Officer |
| | I | Assistant Operations Officer |
| | J | Chaplain |
| | K | Assistant A & R Officer |
| | L | Senior Dental Officer |
| | М | Communications Officer |
| | N | Operations Officer, NAS |
| 0 | 0 | Assistant Medical Officer |
| | P | Staff Officer, NAB |
| | Q | Operations Officer, ComFair |
| | R | Inspection Officer |
| | S | Commanding Officer, Marine Barracks |
| | T | Assistant Supply Officer |

To serve the compliment of officers, the Kahn office designed an imposing "moderne" Officers Club, Building 12. The brick-with-concrete-trim structure faces a fairway on the base golf course. Behind the building are terraces overlooking Fry's Pond, the base, Narrangansett Bay, and a swimming pool. Facilities inside duplicate those in the Enlisted Recreation Building but on a smaller scale and with more opulent appointments. The lobby is dominated by a spiral staircase and several other spaces retain the original streamlined Art Deco decor. This is the only building at Quonset Point with a noteworthy interior.

The base Dispensary is another Kahn design, steel-frame with buick veneer and concrete trim. The original two-story dispensary building, erected in 1940-1941, has a host of single-story, wood-frame ward wings attached.

The Civilian Cafeteria, Building 15, designed in the Kahn office in 1940, completes this survey of the original Quonset Point structures. It served civilians who worked in the nearby warehouses and the A & R Shop. The building is located at the corner of Quonset Road and Third Avenue and takes advantage of its corner site. The main elevation of the one-story, brick building is arcshaped, following the curve of the intersection. It features cast-concrete porch and window trim. The entrance is oriented diagonally to the intersection. The building houses two dining halls that share a common kitchen and serving area. The nearby Cold Storage and Commissary (Building 14), a Cibbs and Hill 1941 design, stored perishables and served as the base's fast-food outlet.

Another complex of buildings, actually off the base but adjacent to it, that deserves mention is the Defense Housing Project (later Kiefer Park), Buildings 200-370. Many of the cottages located here came from the Quonset Point summer colony; others were built from a Fuller, prefabricated duplex house plan. Virtually all the units were two-family dwellings. The Navy built the complex but it was administered by the Federal Housing Authority "because the subject development has been constructed on land not part of the base proper" and because the Navy did not want to get into the real-estate business. These units were for civilian and military personnel on a space-available basis. The Navy also built several other small housing projects in other communities, including Wickford Village, which were not examined in the course of the present study.

This brief look at off-base housing concludes the survey of construction activities at Quonset Point between roughly June 1940 and July 1941. Navy planners had estimated that it might take as long as three years to build the base. The Fuller/Scott consortium brought the base into service in just one year. When the Navy commissioned Quonset Point in July 1941, it was not completely finished, but it did meet Navy standards for operational readiness. Due to the extraordinary need for this facility, the organizational, technical and logistical skills of the contractors, a schedule that brought as many as 12,000 construction workers to the site even during normally slack winter months, and the use of the newly authorized cons-plus-fixed-fee contract, the pace of the work far exceeded expectations. Quonset Point was one of the outstanding achievements of the American mobilization effort and stands today as a symbol of America's determination and ability to arm swiftly in the face of aggression.

Despite the almost frenetic pace of construction activity, Navy officials wanted things done faster, even in early 1941. They wanted to locate more planes at the base and to move in fleet units as quickly as possible. The first "official" construction progress reports began to flow to Washington in February 1941, approximately eight months after the start of construction. On February 7, Captain S. D. McMichter, commander of Patrol Wing Five, reported to the commandant of the First Naval District that base hangar, office and aircraft parking space was excellent and that the base could accommodate an additional fifty enlisted men, one more Chief Petty Officer, and "several" additional commissioned officers, but that the station lacked communication facilities beyond commercial telephone lines and that flying was restricted to daylight hours because of the dredging and the oyster bed stakes, some submerged, that had not yet been removed. 28

Although these facilities were minimal at best, the increasing tempo of Neutrality Patrol operations forced the Navy to move a task force of ships and four patrol plane squadrons into the Norfolk-Newport area in March 1941. The aircraft were to be supported by tenders, but ground support was needed as well. The Navy decided to base all four squadrons, at least 48 planes at Quonset Point, and ordered the base to prepare to receive them. Quonset Point responded that it could accept the planes after March 5, but that the facilities available to them would be "sparse."29

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The Navy's attempt to hurry construction cost it a considerable sum of money (at least an additional \$5,556,000) and unusually bad weather in the winter of 1940-1941 delayed the pace somewhat, but by April work was progressing rapidly. A series of Navy aerial photographs show that by mid-May all the buildings had assumed a recognizable shape and many appeared to be nearing completion. Work went smoothly after that, and on June 25, 1941 Admiral E. C. Kalbfus, Commander of the Naval Operating Base, Newport, wrote to the Secretary of the Navy requesting \$300 for the commissioning ceremonies, which were The proposed guest list included numerous scheduled for July 12, 1941. dignitaries, including Rhode Island's governor, its Congressional delegation, and the mayors of the state's cities. The commissioning ceremonies were held in the Neutrality Patrol Hangar, now officially designated Building 2, on July 12, 1941 as scheduled. Among those speaking at the ceremonies were Assistant Secretary of the Navy Ralph A. Bard, Senator Green, and Admirals Hepburn, Moreell The official Navy announcement of the (BuDocks) and Towers (BuAer).30 establishment of the United States Naval Air Station, Quonset Point, Rhode Island, from the Secretary of the Navy to "All Ships and Stations," dated May 26, 1941, read:

The U. S. Naval Air Station, Quonset Point, Rhode Island, is hereby established, effective July 12, 1941. This station is located on the west shore of Narragansett Bay in Latitude 41° 35' North and Longitude 71° 24' West. 31

At last, the Navy's great northeastern airbase was a reality.

NOTES

- 1 Levine, Green, pp. 96-97.
- 2 Ltr, R.V. Miller to BuDocks, March 25, 1941, File NA 43/A1-1, Vol. 1, RG 71.
- June 7, 1940; Ltr, BuAer to BuDocks, June 8, 1940, both File NA 43/Al-1, Vol. 1, RG 71; Contract NOy-4906, June 10, 1940, File NA 43, Vol. 1, RG 72.
 - 4 Ltr, BuAer to BuDocks, July 3, 1940, File NA 43, Vol 2, RG 72.
- 5 Crandall, Lou R., The George A. Fuller Company; War and Peace, 1940-1947 (New York: The George A. Fuller Company, 1947), pp. 19-20.
 - ⁶ BuDocks, <u>Building Bases</u>, p. 232.
 - 7 Crandall, Fuller, pp. 25-30.
 - 8 Ibid., p. 24; Providence Journal, July 5, 1941, p. 5.
 - ⁹ Crandall, <u>Fuller</u>, pp. 25-27.
 - 10 Providence Journal, February 23, 1940, pp. 1, 11.
- 11 Ltr, SecNav to Vanderbilt, January 17, 1940, File NA 43/A1-1, Vol. 1, RG 71.
 - 12 Providence Journal, January 11, 1940, p. 5.
- 13 Ltr, Cahir to Edison, January 16, 1940; 1tr, BuAer to Cahir, January 22, 1940, both File NA 43/A1-1, Vol. 1, RG 71.
 - 14 BuDocks, Building Bases, p. 107.
- David Chase, Quonset Point Naval Air Station National Register of Historic Places Nomination Form, Item 7, pp. 1-2, Heritage Conservation and Recreation Service, Department of the Interior.
 - 16 Crandall, Fuller, pp. 30-31.
- 17 Scrapbook History, NAS Quonset Point, October 1, 1940 June 29, 1941. Providence College Archives.
 - 18 Chase, National Register Nomination, Item 7, p. 7.
- 19 Ltr, M. A. Mitscher to E. L. Marshall, August 21, 1939, File NA, Vol. 6, RG 72.

- 20 FND History Aviation, p. 19.
- 21 Bureau of Engineering to BuDocks, June 16, 1939, File NA, Vol. 6, RG 72.
 - 22 Mitscher to Marshall, August 10, 1939, File NA, Vol. 7, RG 72.
- 23 Ch/BuAer to CO/NAS Quonset Point, August 29, 1941, File NA 43, Vol 2, RG 72.
 - 24 Crandall, Fuller, p. 30.
- 25 OiCC/NAS Quonset Point to SecNav, May 24, 1941, File NA 43/N4-1, RG 71.
- 26 Ch/BuAer to CO/NAS Quonset Point, September 11, 1941, File NA 43/N4-1, RG 71.
 - 27 Chase, National Register Nomination Form, Item 8, p. 6.
- 28 Foerster, "Aviation II," pp. 464-465; Ltr, CNO to CO/Patrol Force, January 22, 1941; Ltr, CO/Pat-Wing 5 to CO/ First Naval District, February 7, 1941, both File NA 43/A1-1, RG 71.
- Ltr, CNO to Ch/BuDocks, February 21, 1941; Telegram, Com 1 to OpNav, February 27, 1941, both File NA 43/A, RG 80.
- 30 OiCC/NAS Quonset Point to Ch/BuDocks, April 13, 1941, File NA 43/A1-1, Vol. 1, RG 71; Kalbfus to Sec Nav, June 25, 1941, File NA 43, Vol. 2, RG 72; Providence Journal, July 13, 1941, pp. 1, 10.
- 31 SecNav to All Ships and Stations, May 26, 1941, File NA 43/A, RG 80.

CHAPTER 6 Quonset Point - The War Years 1941 - 1945

The beginning of America's direct involvement in World War II on December 7, 1941 immediately put the new naval air station at Quonset Point in the front lines. Tension at bases along the Atlantic Coast ran high while the Navy anxiously awaited word on war with Germany. Clearly, most strategists expected a war on both coasts; that was one of the Hepburn Board's most fundamental assumptions. But Roosevelt's message to Congress on December 8 had spoken only of a war with Japan. In the Pacific, American forces went into action at once and suffered heavy losses in a string of demoralizing defeats that occured until the spring of 1942. In the Atlantic, the Navy was in a no war/no peace situation. The threat to the Atlantic Coast, when and if it came, would certainly come from Germany. But Germany and the United States were offically still at peace. On December 11, 1941, Hitler declared war on the United States. The "two-ocean war" had become a reality.

At Quonset Point, Navy personnel and civilian workers spent the months between the base's commissioning and the start of the war putting finishing touches on the initial phase of the construction work and planning future projects. As the Allied situation deteriorated worldwide, Captain Andrew C. McFall, Quonset Point's first commanding officer, wrote to the Bureau of Aeronautics requesting \$50,000 for "grass and some shrubbery" to improve the appearance of the base. His claim that "the rather sparse style of architecture of the personnel buildings" needed landscaping to improve the station's appearance was accepted by BuAer, and the Bureau allocated \$35,000 for this work.

A series of reports issued between September and November 1941 chronicled the final stages of major construction activity. By November most of the operational and overhaul facilities were "useably complete," although housing facilities were behind schedule. All the initial projects, including housing, were scheduled for completion by mid-December 1941. The opening of hostilities in December focused attention on security at the station. BuAer authorized McFall to hire one hundred additional civilian guards, and in late December the Bureau authorized the expenditure of approximately \$125,000 for illumination control and air raid warning equipment. In a somewhat ironic twist, Kahn's hangars, designed to provide good natural interior illumination, had their vast glass expanses curtained or painted to make them light-tight.

The Chain of Command

When the war began, Quonset Point was ready to accept its full load of war related work. This work can be divided into three functionally distinct operations — combat, training, and overhaul — each of which will examined in detail below. First, however, it will be helpful to discuss Quonset Point's place in the the command structure on the East Coast and then to review the chain of command on the base itself.

Quonset Point was under the operational control of the Commander in Chief, Atlantic Fleet (CinClant), in 1941 Admiral Robert Ingersoll. Ingersoll passed his directives to the Commander, Eastern Sea Frontier, Task Force 90, Tenth Fleet, Vice Admiral Adolphus Andrews. Below Andrews was the Commandant, First Naval District, based in Boston. The Commander, Narragansett Croup (CTG 90.2), who was also Commandant of the Naval Operating Base, Newport -- Rear Admiral E. C. Kalbfus -- interpreted the general orders that he received from his superiors and issued operational orders that were executed by the Commander, Operations Control Department, Narragansett Air Patrol (CTU 90.2.4). This office assigned specific missions to the Operations Department at Quonset Point.

The Table of Organization of NAS Quonset Point demonstrates the full range of operations carried out by and from the base. The Table of Organization is presented in a somewhat simplified form in Table 3. 5

Table 3 Table of Organization, Quonset Point Naval Air Station

Commanding Officer

Aide to CO

CO, Marines

Executive Officer CO's Staff

Legal Officer Officer of the Day Asst. Executive Officer Navy Management WAVES Facility Liaison Officer

Department
Assembly and Repair

Sections
Engineering, Personnel
and Administration, Planning,
Production, Vocational
Training

Supply and Accounting

Accounting, Service, Outgoing Stores, Incoming Stores, Purchase, Storage Salvage

Public Work

Engineering and Design Administration, Power Plant, Enlisted Personnel, Contract, Maintenance

Operations

Air Traffic, Transport, Flight, Aerology, Photo, Surface Craft, Crash and Rescue

Disbursing

Administration and Fiscal, Public Voucher, Labor Roll, Transport Claims, Military Accounts, Clothing and Small Stores

Personnel

Enlisted, Enlisted WAVES. Barracks, Master at Arms, Mess Hall

Executive

NAS Administration, Chaplains, Safety Office, Legal Assistance, B.O.Q., Commissioned Officers Mess, War Bonds, Commissary Medical

Administration, Medical Surgical, Nursing, Dental, Out-Patient, Sanitation, Oxygen Indoctrination, Property and Accounts

Welfare

Welfare, Recreation, Entertainment, WAVES Athletic and Entertainment, Library Benefits and Insurance, Education

Personnel Relations

Labor Board, Personnel Classification, Employment Labor Relations, Employment Services, Training, Education

Communications

Radio Operations, Radio Material, Registry of Public and Classified Correspondence, Telephone, Post Office

Inspection and Survey

NAS Inspection, Engine Overhaul Inspection, Aircraft Inspection, Supply Inspection

Ships Services

Misc. Shops and Services, Restaurant, Laundry

Commissary

Accounting, Galley, Storage

Training

Air Navigation, Gunnery, Film Library, Special Devices

Security

Civilian Guards, Fire Dept., Pass Office

Or dnance

Magazine and Ammunition,

Torpedo

Athletics

Sports, Physical Training, Swimming, Material

Air Combat Intelligence

Link Celestial Navigation Training

Patrol

Quonset Point went to war footing on December 7 and had its first air raid on December 9, 1941, when observers reported unidentified aircraft approaching Boston. The planes turned out to be American PBY's from Argentia, Newfoundland, bound for Quonset Point. Germany declared war on the United States on December 11th and Hitler ordered U-Boat commanders to begin unrestricted warfare against the United States on January 13, 1942, under the codename "Operation Paukenschlag" (Downbeat on the Kettledrum). Thus began America's official involvement in the Battle of the Atlantic, the intensity of which would wax and wane throughout the duration of the war.

The Battle of the Atlantic was, in general, a fight for the protection of shipping, supply, and troop transport waged by the United States Atlantic Fleet, virtually the entire Royal Navy, and other Allied naval vessels against Axis (primarily German) submarines, aircraft, and a handful of surface ships. It was essentially a war of providing supplies and maintaining communications with American forces in Europe and Africa and with America's Allies, especially Great Britain and Russia. As such, it was a tactical offensive designed to support the strategic defensive policy of blocking an Axis approach to the western hemisphere.

Patrol planes attached to the Narragansett Group routinely patrolled an area from the Chatham Light 112° true to the Eastern Sea Frontier Boundary at 40°31' N and from the Watch Hill Light to Montauk Point then 112° true to the Eastern Sea Frontier Boundary. Within this area Quonset Point aircraft flew "Routine Inner Patrol" from Block Island to Gay Head, Buzzards Bay to Quonset Point and "Routine Outer Patrol" from Block Island to Gay Head, Buzzards Bay to the Nantucket Light Buoy to Quonset Point. They also provided direct and general air cover for convoys in the area.

Although aircraft from Quonset Point flew patrol missions virtually around the clock for three and a half years, the base's combat record was not remarkable. The "War Diary" records daily activity but little combat. Apparently only one ship, the Panamanian tanker Norness, was sunk in the area patrolled by Quonset Point aircraft, and this occured very early in the war, on January 14, 1942. Quonset Point aircraft could claim no confirmed U-Boat kills. No base personnel were lost through enemy action throughout the war, yet four planes disappeared with all hands while on patrol.

Training

Quonset Point's most important contributions to the war effort came from its training and overhaul operations. During World War II, instructors at Quonset Point trained pilots and air crewmen for carrier operations. Battle-damaged aircraft were repaired by the skilled workers in the A & R Shops, which operated eighteen hours a day, seven days a week.

One of the first training activities the Navy established at Quonset Point was the Naval Air Training School (Indoctrination). The Bureau of Aeronautics established the school to train officers to fill executive and administrative positions that did not require flying skills. To this end BuAer recruited an initial group of 500 civilians between the ages of 30 and 40 who had "demonstrated marked ability in civilian life." These men became U.S. Naval Reserve Class A-V(S) (Aviation Specialist). They generally lacked military background, so the Navy sent them to Quonset Point for indoctrination, although the program extended beyond course work in how and who to salute. BuAer established a syllabus that called for a two-month course designed to acquaint student-officers with military and naval organization, background, customs, and regulations. "All these officers must be made to fully understand the requirements of military discipline and the necessity of proper military bearing, not only for their future personal development but also to enable them to properly direct their subordinates." For this BuAer recommended Marine-led close order infantry drill.

Although the Navy originally intended to train only one class of 500 officers, the demand for these men became so great that before the program ended in February 1944 almost 7,000 men, mostly lawyers, teachers, journalists, and business executives recruited for the duration, took the short course before moving on to other duties. Quonset Point installed the school in Building 435, the old Contractors Administration Building and formerly the Rhode Island National Guard Dispensary. [HAER 244] BuAer enlarged and remodelled the building in 1942 at a cost of \$350,000. Equipment cost an additional \$80,000. Perhaps the school's most famous graduate was Richard M. Nixon, although such other contemporary or future notables as Henry Fonda and Dana Andrews also completed the course.

The top NATS (I) graduates went on to the Naval Air Combat Information School, also located at Quonset Point. Besides having successfully completed the basic indoctrination program, the prospective Air Combat Information Officer needed a Bachelor of Arts degree, a proven record of success in civilian life, good character, and leadership qualities. The course consisted of a 230-hour program of instruction in navigation, recognition of ships and planes, military organization, ordnance, air combat tactics, map reading, photo interpretation, communications, aerology, camouflage, and geography. The instructors were generally civilian college professors, recruited from Harvard, Yale, Cornell, Princeton, and other well-known institutions. The program closed in September 1944, after graduating 1,448 students, many of whom went on to serve on American carriers in the Pacific.

The Quonset Point Training Department ran the pilot and aircrew training programs. It offered programs in fixed and free gunnery, navigation, instrument flight, and high level and torpedo bombing. The Department had three components: the Aviation Free Gunnery Unit, the Air Navigation Training Unit, and the Link Celestial Navigation School. They offered two types of courses — a short refresher course for aircrew whose carriers had been withdrawn from combat for refit and repair, and a longer course for personnel just out of basic training at Pensacola and elsewhere. Before 1943 the Training Department held its classes anywhere it could find space. But in 1943 the Navy opened the Synthetic Training Facility (Buildings 455-457, 509-511); thereafter, most non-flying instructional programs were housed in this complex.

The Aviation Free Gunnery Unit opened in December 1942. It became the Combat Aircrew Training Unit in December 1944. Regardless of the name, it offered a five-week course in air gunnery. Trainees spent four weeks in the classroom, learning how to maintain their weapons and turrets, recognition, sighting, voice procedure, pyrotechnics, oxygen use, and range estimation. They also spent one week on the gunnery range. The unit also offered a one-week refresher course, consisting of programs in recognition, deflection, and range estimation.

The Air Navigation Training Unit, established in August 1943, offered courses primarily for pilots in piloting skills, dead reckoning navigation, radio, celestial navigation (classes were held in the silo-like Buildings 455-456, 509-511), and cruise control and long range flight planning for patrol plane pilots. This section offered training "flights" in Link Trainers that lasted up to ten hours. The Link Celestial Navigation School, opened in September 1942, offered a ten-week course on the maintenance and training uses of the Link Trainer. The program was for Link instructors, who were then assigned to other bases. The Advanced Base Aviation Training Unit, established in December 1943, offered specialized mechanical training in aircraft maintenance to personnel who were then assigned to overseas bases.

Quonset Point also provided facilities for inflight training, including air-to-air combat, level, dive, and torpedo bombing, and air-to-surface attack techniques. In these programs newly established or refitted squadrons could learn to fly and fight as a unit. Upon completion of the requisite number of flying hours the Navy assigned the squadrons to combat carriers. All these activities eventually resulted in severe overcrowding at Quonset Point.

The Hepburn Board had recommended that Quonset Point provide facilities for two carrier air groups (approximately 180 planes) and for two patrol plane squadrons (24 planes). The base's initial design was rooted in these numbers. As naval aviation expanded, planned deployment at Quonset Point grew as well, but generally without any additional facilities. Under the "10,000 Plane Program" (June 15, 1940) Quonset Point was to house approximately 250 planes. The Navy knew that these planes would create at

least an element of overcrowding, so it planned to acquire or build smaller air facilities in the vicinity of Quonset Point to relieve the overcrowding. These "Naval Auxiliary Air Facilities" (NAAF) would provide subsistence and support facilities like the naval air station, but on a much smaller scale. Initially, the Navy wanted to build three of these outlying fields to complement NAS Quonset Point. The recommended sites were at Charlestown and Westerly, R.I., and Martha's Vineyard, Mass. Negotiations for the purchase of land for these facilities began in September 1940, but material and manpower shortages delayed the completion of these stations until 1943.

When the Navy settled on a 27,500-plane program to meet its World War II needs, Quonset Point's planned deployment increased as well, to about 275 planes on a regular basis and about 100 more for short periods. As the NAAF's neared completion in late 1942 the Navy revised its deployment plans somewhat. Quonset Point's capacity was cut to about 235 planes while the Navy assigned 60 planes to Westerly, 45 to Martha's Vineyard, and 24 to Charlestown.

The Navy planned to spend approximatly \$5,000,000 on the three NAAF's. Facilities at each would be similar: barracks, a subsistence building, a BOQ and an Officers Mess Hall, three 3,400-foot runways, a hangar, a dispensary, an administration building that also served as a control tower, and a storehouse. All these facilities were designed and built according to standard Navy plans for temporary facilities.

Although Quonset Point's authorized deployment held steady throughout 1943 (at about 230 planes), the actual deployment grew. Each of the new training units had aircraft attached to it, and a new command, Commander Fleet Air Quonset (COMFAIR), also brought more planes to the station. COMFAIR, established in January 1943, exercised operational control over all naval aircraft with the Atlantic Fleet between Cape May, N.J. and Argentia, Newfoundland. The command, which was stationed at Quonset Point until the base closed, coordinated the training of all units, assuring that the latest developments and techniques in aerial warfare reach all aircrews.

In October 1943, COMFAIR complained that the base was consistently operating at 200% of its theoretical capacity, with about 400 aircraft based permanently at the station. At about the same time, an unidentified officer wrote:

I'm leaving Quonset to go to Pearl \cdot . The traffic at Quonset is getting worse and worse. We has an average of 130 takeoffs and landings per hour over a ten hour period from 0800 to 1800 one day \sim 660 aircraft on the station on April 1 - What a place!

On June 1, 1943 the Navy placed the NAAF's at Charlestown, Westerly, and Martha's Vineyard in operation. Each station housed a permanent force of 98 officers and men but had facilities to house about 1500 men from the fleet aircraft squadrons nominally based at Quonset Point. Each station was a

permanent individual command, although the officer in charge reported to Quonset Point's commanding officer. Besides the berthing and mess facilities, the fields were also equipped to handle aircraft service and minor repairs and medical and rescue work.

The Navy added more NAAF's as Quonset Point satellites throughout 1943 and 1944, including several former Army fields. By the end of 1944 the following auxiliary air facilities had come under the operational control of the commanding officer, NAS Quonset Point:

Table 4
NAAF's Under the Control of NAS Quonset Point,
Mid-1944

| Charlestown, R.I. | 588 | acres |
|--------------------------|-------|-------|
| Westerly, R.I. | 419 | ** |
| Martha's Vineyard, Mass. | 640 | ** |
| Hyannis, Mass. | 280 | 17 |
| Nantucket Island, Mass. | 570 | ** |
| Groton, Conn. | 398 | ** |
| Otis Field, Mass. | 1,198 | ** |
| New Bedford, Mass. | 466 | 11 |
| Plymouth, Mass. | 284 | ** |
| Beavertail, R.I. | 33 | ** |

When Quonset Point became the headquarters for yet another new command in October 1944, it added still more fields to its "system." Under the new command arrangement, the commanding officer, NAS Quonset Point also became Commander, Naval Air Bases, First Naval District. This was mainly an administrative command for purposes of supply; in addition to the bases listed in Table 4, Quonset Point now had administrative control over the following facilities:

Table 5
Naval Facilities Under the Administrative Supervision of NAS Quonset Point, October 1944

NAS Argentia, Newfoundland NAS South Weymouth, Mass. NAS Brunswick, Me. NAF Newport, R.I. CGAS Salem, Mass. NAAF Rockland, Me. NAAF Sanford, Me. NAAF Bar Harbor, Me. NAAF Casco Bay, Me. NAAF Beverly, Mass. NAAF Ayer, Mass.

When the war ended, virtually all these facilities were immediately reduced to caretaker status and eventually sold or given to various municipalities. Although these auxiliary air fields helped to alleviate overcrowding at Quonset Point and to make the air traffic controllers' job a little bit easier, they never completely solved the problem of overcrowding. Almost from the day it opened Quonset Point serviced and based many more aircraft than it was designed to handle.

Overhaul and Repair

The third and final element of Quonset Point's World War II operational history is the story of the Assembly and Repair Department. Under Section 4, Article 7401 of the 1941 station regulations, the A & R Department was authorized to perform "overhaul, repair, test, and manufacturing operations on aircraft, engines, accessories, and spares." The Department began operations on November 1, 1941, when workers repaired a PBY-5A wingtip float. The labor force initially consisted of 17 Navy officers, four enlisted men, and 25 civilians; by December it had climbed to 60 officers, 1,000 enlisted men, and 2,950 civilians.

The A & R Department trained its own military and civilian personnel. The military training section offered four levels of instruction. New, unskilled labor entered apprentice training, a six-month program where instructors exposed the worker to a number of different tasks. When the apprenticeship ended, the Navy personnel entered a more specialized in-service training program in a particular job classification. As a fully trained employee, the worker could take "practical factor courses" which exposed him to occupational specialties in higher job classifications. Highly skilled employees occasionally attended manufacturer's schools at factories across the country.

Civilian workers went through a somewhat more complicated training regime. Most employees entered "Vestibule Training," a four-week basic course run by the A & R Vocational Training Division. Here skilled mechanics discussed nomenclature, tools, and elementary operations. From the vestibule program the employee progressed to several basic technical courses where he learned how to read a blueprint and the nomenclature of aircraft repair and construction. The worker was then assigned to a specific division and section where he began in-service training. Once he had mastered his trade the worker could elect to take supervisory training courses or instructor training courses. As with the military personnel, the best civilian workers frequently visited manufacturer's plants for specialized instruction.

Women formed a large part of the labor force in the A & R Department, especially in the sewing and flotation shops. As the Providence Journal explained the situation, "They are proving to be as adept with a wrench as they are universally known to be with a needle." Civil-military relations within the Department were generally good, with a spirit of informality and camaraderie prevailing. The A & R Officer was always a naval officer, but on the production line naval personnel were as likely to take orders from a civilian as they were from an officer. According to one former employee, the A & R Department was "a good place to work."

It will be useful here to summarize very briefly the assembly and repair process as carried on at Quonset Point during the war. When an aircraft, regardless of size or type, arrived at the A & R shop it was taken apart, piece by piece. The engines came out and went to a cleaning station, where they were boiled in a chemical bath for up to three hours. After it

cooled, workers tore the engine down and inspected the component parts, both visually and electronically. Worn parts were noted and the components moved on to the rework sections. Here workers replaced parts as needed and incorporated design modifications as they came from the factory. The engine was then reassembled and run in a test cell for eight hours, after which workers installed it in its original airframe. The Quonset Point A & R Department specialized in the Pratt and Whitney R-2800 series engines which powered many different types of naval aircraft.

While engine overhaul was in progress, other A & R shops worked on the airframe itself. The metal shop replaced fatigued or damaged fuselage and wing parts, while other workers repaired the controls, the radio gear, flotation and survival equipment, and the hydraulics system. When all the components were reassembled the plane was repainted, taken on a short test flight, and returned to squadron service, "almost as good as new" (and often better than new if workers had made any design modifications.)

During World War II most of the A & R shops were clustered together in Building 60. They occupied almost 350,000 square feet of floor space, divided as follows:

Table 6
A & R Shop Space Allocation

| Main Offices (Administration) | 7,000 | sq. ft. |
|-------------------------------|---------|---------|
| Engine Overhaul | 27,500 | ** |
| Planning and Engineering | 29,500 | " |
| Aircraft Overhaul | 110,000 | н |
| Inspection | 18,000 | 11 |
| Other Shops | 137,700 | 91 |

Under "ideal" conditions, assuming no labor troubles and an adequate supply of parts, the Navy estimated that the Department could handle 50 major aircraft overhauls and 100 engine overhauls per month, working two shifts per day, seven days a week.

The A & R Building had some deficiencies. The general lighting was poor and had to be supplemented by additional overhead, bench, and machine lights. The electrical system as a whole was proving to be just adequate to handle the demand in 1943, and it had virtually no excess capacity. The engine test center — six test cells grouped around three control rooms — was a standard design but by 1943 it was outdated and needed improvement. Supervisors often complained of a lack of working space, despite the addition of 30,000 square feet of space gained when the Radio-Radar Shop took over almost half of Building 1 in 1942.

An unspecified management problem in the spring of 1943 forced BuAer to assign an A & R officer from San Diego to Quonset Point. BuAer felt that the A & R Department at San Diego was so proficient that it could "render the greatest amount of assistance to NAS Quonset Point in the shortest space of

time." ³³ BuAer was also dissatisfied with the Quonset Point Ordnance Shop. In 1942 it noted that at NAS San Diego 90 men were regularly overhauling 2500--2700 guns per month, while at Quonset Point 40 men could only turn about three hundred guns per month. ³⁴ In the face of this BuAer sanctioned greater specialization at its A & R Departments, claiming that this would mean higher volume at fewer establishments, greater efficiency, more economy in spare parts stocking, and better supervision at fewer work locations. The Navy knew that specialization would mean cutbacks which could cause "personal disappointment to many loyal employees of the Navy," but that the issue had to be faced, or it would recur on an increasing scale in the future.

The planned consolidation did not go into effect until 1945, but when it did the response the Navy expected was not long in coming. On May 10, 1945, Alfred C. Masciarelli wrote to Senator Green:

I would like to inform you with a problem which has occurred at my work. I am an aircraft ordnance mechanic, which consists of working with machine-guns, bomb racks, and bombing equipment. My place of work is the U.S. Naval Air Base, Quonset, Rhode Island. Which you are the father.

This is my problem. [Relates that the Navy is planning to close the machine gun overhaul facility.] All machine guns will be overhauled in two Southern bases, Norfolk, Va. and Jacksonville, Fla. This will effect forty employees.

We as a body feel that why can't the work be split between us Northerners and the South. 36

The Navy, responding to Green's subsequent query, told the Senator that its new "integrated aeronautic program" necessitated cuts at some places and that it would continue to phase out some activities at Quonset Point. This would not be the last time Rhode Island politicians were faced with the dilemma of watching Navy economy and efficiency programs chip away at Quonset Point. 37

In other departments, however, Quonset Point's A & R shops earned high marks and commendations from Navy officials. In early 1945 the drop hammer and welding shops solicited BuAer for more work, citing a lack of suitable demand at Quonset Point. In April 1945 Rear Admiral D. C. Ramsey, Chief of the Bureau of Aeronautics, noted that aircraft and engine overhauls in January, February, and March were "consistently in excess of scheduled requirements." He praised workers for a "well-directed effort on the part of all concerned," and told them that their work was "an important and direct contribution to the War Effort."

War-time Expansion and Non-Operational Activities

All of these operational, training, and maintenance activities brought more personnel to Quonset Point, and with the people came the problem of overcrowding. The Navy did disperse aircraft to nearby airfields but it could hardly disperse the personnel who were needed on the base itself. In fact, many of the base's civilian personnel were dispersed in any case, since they came from all parts of Rhode Island and also from Massachusetts and Connecticut. Complaints about the crowded conditions at many military posts reached Congress, and in 1943 a subcommittee of the House Committee on Naval Affairs made an "Investigation of Congested Areas." The group visited Newport and Quonset Point on May 11-12, 1943.

The subcommittee heard that the major problem affecting civilian and military personnel at Quonset Point and at Newport was a lack of housing and transportation. The inadequacies of the train and bus service were compounded by rationing, which made vehicular use difficult. These problems were particularly severe between Fall River, Mass. and Newport, and between Newport and Quonset Point. It was less of a problem between Providence and Quonset Point. In 1943, Quonset point employed 3,041 civilians, many of whom lived in Providence, 22 miles to the north. According to base figures, about 90% of these employees came to work on a share-the-ride plan. The rest came by bus. Traffic jams were the rule rather than the exception, and bad weather invariably resulted in increased absenteeism and tardiness. Despite the investigation, there were was little Congress or the Navy could do for the civilian personnel, especially since the New York, New Haven and Hartford Railroad refused to supply a daily Providence-Quonset Point train without a minimum passenger guarantee which the Navy could not provide.

Civilian facilities on the base were generally adequate, although the Civilian Cafeteria (Bldg. 15) suffered from severe overcrowding. Designed to accommodate about 500 people at a time, it usually served about 10,000 meals in a twenty-four hour period. A \$13,000 internal improvements program, approved September 7, 1943, added more cooking and serving space and at least improved the food serving system.

Facilities for military personnel were overcrowded as well. Using September as a convenient benchmark, it is possible to trace the sharp rise in the number of personnel assigned to the base:

Table 7

Military Personnel Assigned to NAS Quonset Point, 1942-1944

September 1942 232 Officers 1,315 Enlisted men September 1943 432 Officers 2,548 Enlisted men September 1944 379 Officers 3,176 Enlisted men

The Navy was more successful in developing solutions to overcrowding on the base itself, since these problems were under its direct purview.

Throughout the war, the Navy had to repeatedly fend off requests from Quonset Point's neighbors for compensation for the inconvenience the base caused them. Many of these requests passed through Senator Green's office, and his staff must have tired of receiving the same response to his queries: the Navy did not plan to buy additional land, the hardships the homeowners faced were not "sufficiently great to justify the purchase of this land by way of compensation," and the homes were still habitable despite the possible loss of some of their recreational value. Although the Navy bought no new land, it did continue to build more facilities on the land it already owned.

The basic construction contract, NOy-4175, was changed repeatedly as new projects were added. The general procedure for requesting additional facilities began with the base commanding officer, who sought construction funds from BuAer. BuAer considered and frequently modified the request and, if it approved, told BuDocks to prepare plans. When BuAer approved the plans BuDocks contracted to have the work done.

The early war cost-plus-fixed-fee contracts were terminated in August, 1943, and most of the projects proceeded under lump-sum contracts, although Quonset Point suggested that the CPFF contracts be maintained so the Public Works Department personnel could do the design work. The Navy denied this request. Navy directives stated that as much wartime construction as possible should be of "the cheapest, temporary character." Construction projects totalling less than \$1,000 and repair projects costing less than \$5,000 could be arranged locally, without specific BuAer approval, and charged to the station's maintenance and operations allotment. To receive BuAer approval for larger projects the station had to demonstrate that the project "contributed to the war effort to an important degree, that it meets the requirements of the Bureau of Aeronautics, and is required to support the latest aviation shore facilities directives as approved and issued by the Chief of Naval Operations."

Much of the authorized wartime construction at Quonset Point was designed to alleviate overcrowding in the various departments. When Seaplane Hangar 3 (Building 406) was completed in late 1942, Seaplane Hangar 1 (Bldg. 2) was turned over to the A & R Department for use as a final inspection and paint spray hangar. As more enlisted men poured onto the base and facilities for transient personnel ran out, the Navy built six standard Type Bl-B. 232-man barracks (Bldgs. 425-430) in the block east of the main Enlisted Barracks complex. The site was vacant because the Navy had never built the additional permanent barracks it had planned. The temporary structures were identical, H-shaped structures, 112' x 28' x 22'. Female enlisted personnel lived in Buildings 490, 502-503, the WAVES Barracks. were also temporary structures, completed in 1944. Building 522, a 185-man addition to the Bachelor Officer's Quarters was occupied early in 1945.47

In 1942 workers made the first several additions to the Dispensary, increasing its capacity to 500 beds. Before the war ended wooden ward wings surrounded it on two sides. In 1942 the base requested funds to build a chapel. Construction did not begin until 1945, however. Buaer recommended

that the structure be constructed "on the high ground in the angle between Lexington Street and Ranger Street." The site was duly chosen, and construction began in the summer of 1945. The cruciform shape of the Public Works Department design allowed for three seating areas, and the altar was track-mounted to allow various denominations access to the large seating area.

Building 155, the Gymnasium/Drill Hall opened in 1946.

Additions to the warehouse complex comprised the largest single block of wartime construction activity. Base personnel recognized from the outset that the base needed additional warehouse space, and requested additional funds as early as late 1941. BuAer authorized Buildings 374 and 375 in 1942 and Buildings 483 and 484 in 1944. Each pair was built from standard BuDocks plans. Each provided about 50,000 square feet of floor space. C. Ahlbourg and Sons, Inc., of Cranston, R. I. built 483 and 484 under contract (NOy-6245 (\$324,345). (Construction records for Buildings 374 and 375 were not available.) New railroad spurs were constructed to serve these buildings as well as the Commissary, which by 1944 was handling 50 tons of food per day. 50

As the war in Europe neared its conclusion, the Bureau of Aeronautics was faced with a substantial funding cut and ordered all stations to review their public works projects funding requests. Now, only the most vital projects could be funded. On August 24, 1945, the Bureau of Yards and Docks cancelled six construction contracts at Quonset Point, including one for a fourth seaplane hangar. By September, BuAer was attempting to keep money already appropriated for Fiscal Year 1946 in the face of Congressional and Bureau of the Budget demands that defense expenditures be cut sharply. Funding cuts followed quickly, and BuAer advised its naval air stations to submit much smaller budget requests for Fiscal Year 1947. The days of free spending and rapid construction were over.

The war in Europe ended in May 1945; Japan surrendered in September. On October 9, 1945 BuAer allocated \$6,200 to Quonset Point "for removal of blackout paint from hangar doors and skylights and installation of floodlights." As the natural light poured back into the work areas after four years of darkness. Quonset point prepared to adjust to the forthcoming operational cutback and to face the uncertainty of peace after the hectic confusion of war. 52

NOTES

¹McFall to Ch/BuAer, July 10, 1941, File NA 43, Vol. 2, RG 72. McFall served as Quonset Point's CO until 1942, when he went to the Pacific. He retired as a Rear Admiral after thirty years in the Navy in 1946.

 2 Foerster, "Aviation II," pp. 465-467; CO/NASQP to Cinclant, November 14, 1941, and CNO to Ch/BuDocks, November 27, 1941, all in File NA 43, Vol. 2, RG 72.

3Ltr, Ch/BuAer to Ch/BuDocks, December 11, 1941; 1tr, CO/NASQP to Ch/BuAer, December 13, 1941; 1tr, CO/NASQP to Ch/BuAer, December 15, 1941, all File NA 43/Al-1, RG 71.

4"First Naval District History - Aviation," pp. 20-21.

⁵Ibid., p. 71.

6<u>Ibid.</u>, p. 18; Ladislas Farago, <u>The Tenth Fleet</u> (New York: Ivan Obolensky, Inc., 1962), pp. 44-46.

⁷Morison, <u>Naval Operations</u>, <u>I</u>, pp. xii-xiii.

⁸FND History, Aviation, pp. 21-22.

⁹Ibid., p. 18; see also the Quonset Point "War Diary," Naval History Division Classified Operational Archives.

¹⁰Ltr, Ch/BuAer to Commandant, USMC, January 10, 1942, File NA 43, Vol. 3, RG 72.

11 Ltr, BuAer to BuDocks, April 17, 1942, File NA 43/N4-9, RG 71; ltr. BuAer to CO/NASQP, January 21, 1942, File NA 43, Vol. 3, RG 72. Information on the graduates came from "NAS Quonset Point, R. I. Commemorative Edition, July 12, 1941 - June 28, 1974." Supplement to the Rhode Island Pendulum, East Greenwich, R. I., Wednesday, June 26, 1974, p. 15.

12_{FND} History - Aviation, pp. 32-37.

¹³Ibid., pp. 38-39.

¹⁴1bid., pp. 40-42, 53-56.

¹⁵Tbid., pp. 46-50.

16Ltr, CNO to Bureaus, July 15, 1940, in Davis, BuAer XI, p. 335; BuDocks, Building Bases, p. 238; 1tr. CNO to Bureaus, June 1, 1944, in Davis, BuAer XI, pp. 433-434; FND History - Aviation p. 15.

- $$^{17}{\rm Davis},$ BuAer, XI, pp. 352, 363-364; Foerster, Aviation, II, pp. 360-361.
- ¹⁸Ltr, BuAer to BuDocks, August 28, 1942, File NA, Vol. 7, RG 72; 1tr, BuAer to BuDocks, September 2, 1942, File NA 43, Vol. 3, RG 72; BuDocks to 0iCC, NOy-4175, October 9, 1942, File NA 43, NOy-4175, RG 72.
- ¹⁹Davis, BuAer XI, pp. 383-384, 401; "History of the NAS Quonset Point, Rhode Island," prepared by Joint ComFair/NaS Quonset Point Public Affairs Office, 1970, Providence College Archives.
 - ²⁰Foerster, Aviation II, p. 473.
 - ²¹Ibid., pp. 487-488.
- ²²Ltr, CO/NASQP to Commandant, First Naval District, June 1, 1943, and CO/NASQP to Ch/BuPers, February 20, 1943, both file NA 43, Vol. 4, RG 72.
 - ²³FND History Aviation, pp. 16-17.
- 24 Ltr, Op 31 D to BuAer Supply Division, February 22, 1945, File NA 43, Vol. 1, RG 72; Ltr, CNO to Ch/BuAer, September 15, 1945, File NA 43, Vol. 2, RG 72.
 - ²⁵FND History Aviation, p. 26.
 - ²⁶<u>Ibid.</u>, pp. 29-30.
 - ²⁷Ibid., pp. 27-28.
- ²⁸Providence <u>Journal</u>, February 25, 1945, Section 3, p. 6; Frederick C. Williamson, interviewed by author July 26, 1979, Providence, Rhode Island.
 - ²⁹Providence <u>Journal</u>, February 25, 1945, Sect. 3, p. 6.
 - 30 Ibid.
 - 31Ltr, CO/NASQP to Ch/BuAer, May 6, 1943, File NA 43, Vol. 4, RG 72.
 - 32 Ibid.
- 33 Ltr, Ch/BuAer to CO/NAS San Diego, March 29, 1943, File NA 43, Vol. 4, RG 72.
 - ³⁴BuAer Memo, May 19, 1942, File NA 43, Vol. 3, RG 72.
 - 35 Ibid.
 - 36Ltr, Masciarelli to Green, May 10, 1945, File NA 43, Vol. 1, RG 72.

- ³⁷Ltr, Ch/BuAer to Green, May 31, 1945, File NA 43, Vol. 1, RG 72.
- 38 Telegram, CO/NASQP to BuAer, January 26, 1945, File NA 43, Vol. 1, RG 72.
- ³⁹Ltr, Ch/BuAer to CO/NASQP, April 13, 1945, File NA 43, Vol. 1, RG 72.
- 40U.S. Congress, House. Committee on Naval Affairs. <u>Investigation of Congested Areas</u>, Part 4, Newport, R. I. area. (Washington: GPO, 1943), pp. 1039-1161.
- $^{41} \rm Ltr,~OiCC/NASQP$ to Ch/BuDocks, March 12, 1942, File NA 43/L2Q, Vol. 1, RG 71.
 - 42Ltr, CO/NASQP to BuAer, April 12 1942, File NA 43, Vol. 4, RG 72.
- 43 Quonset Point War Diary, NHD Archives; FND History Aviation, p. 14.
 - 44Ch/BuAer to Green, August 11, 1944, File NA 43, Vol. 4, RG 72.
 - 45Contract changes in File NA 43/NOy-4175, RG 72.
- 46Ltr CO/NASQP to Ch/BuDocks, July 13, 1943, File NA 43, Vol. 4, RG 72; ltr, CO/NASQP to Commandant, First Naval District, November 10, 1941, File NA 43/A1-1, RG 71; ltr, Ch/BuAer to CO/NASQP, March 27, 1944, File NA 43, Vol. 5, RG 72; Ch/BuDocks to Public Works Officer/NASQP, December 22, 1943, File NA 43, Vol. 4, RG 72; ltr, BuAer to SecNav, January 15, 1945, File NA 43, Vol. 1, RG 72.
- 47Ltr, CO/NASQP to Ch/BuAer, August 18, 1942, File NA 43/NOy-4175, RG 72; 1tr, CO/NASQP to Ch/BuAer, January 1, 1945, File NA 43, Vol. 1, RG 72.
- 48Ltr, CO/NASQP to Ch/BuAer, December 16, 1942, File NA 43/N9-3, RG 71; 1tr, BuAer to CO/NASQP, October 23, 1941, File NA 43/N4-7, RG 71; BuAer to BuDocks, March 28, 1945, File NA 43, Vol. 1, RG 72.
- 49Contract NOy-6245, Rhode Island Historical Society Manuscripts Collection, "Quonset Point Davisville Contracts."
- ⁵⁰Ltr, CO/NASQP to Ch/BuAer, April 17, 1944, File NA 43, Vol. 5, RG 72.
- 51Ch/BuAer to CO/NASQP, May 25, 1945, File NA 43, Vol. 1, RG 72; Ch/BuDocks to OiCC, NASQP, August 24, 1945, File NA 43, Vol. 2, RG 72; Ch/BuAer to ComNAB 1, September 19, 1945, File NA 43, Vol. 2, RG 72.
 - ⁵²Ch/BuAer to CO/NASQP, October 9, 1945, File NA 43, Vol. 2, RG 72.

CHAPTER 7

The Postwar Years 1945-1974

When World War II ended in 1945, Quonset Point was the hub of naval aeronautical operations in the Northeast. Within thirty years the base was literally a ghost town, devoid of any military activity or strategic significance. Compared to the race to construct the base, its slide to oblivion was slow, undramatic, but inevitable. After the frenzied pace of World War II, the 1945--1974 era seems low-key. Korea and Vietnam produced surges of operational vigor, but the sense of immediacy, of urgency that pervaded the base during World War II was missing. There were no enemy subs lurking off the coast, or so it seemed, and the new enemy seemed less well defined and perhaps less threatening than the Germans or the Japanese. Old enemies became new friends as Quonset Point took its place among the ranks of Cold War outposts, unobtrusively carrying out its assigned missions through periods of calm and crisis.

When World War II ended, the Navy began to divest itself of the now superfluous auxiliary air fields that surrounded its major air stations. By October 1945, local interests across the country were out in force, trying to gain control of the old air bases. Many of these efforts were made through Congressmen, who took their constituents' requests to the Navy Department. None of the localities wanted the Navy to remove any of its equipment from the fields. As commercial aviation expanded after the war, many small towns wanted an airport, and if they could obtain one fully equipped at government expense, so much the better. Unfortunately for these municipalities, however, in 1944 Congress had passed the Surplus Property Act which established a board that was to regulate the disposition of excess government land and material. When Congressmen appealed to the Navy for assistance or information the Navy referred them to the Surplus Property Board. The military had first call on the now-surplus equipment. What the services did not need or want went to the highest bidder. In this manner the Navy quickly rid itself of its excess bases and equipment.

There was never any serious consideration of closing Quonset Point after the war. It was, after all, only about four years old and strategically located according to long-term naval planning. However, the Navy did conduct a survey of the "Continental Shore Establishment" shortly after the end of the war to establish retention policies. The report of the Horne Board, Admiral E. J. Horne presiding, transmitted to the Secretary of the Navy in February 1946, suggested that the Navy shore establishment should be based on the general policy of providing a well balanced and integrated nucleus of Navy owned and controlled facilities "capable of rendering adequate support to the planned peacetime fleet and capable by means of strategic reserve capacity, of being expanded and converted quickly and efficiently in the event of war." The Horne board established the following "checklist" for determining priority for retention:

Table 8 Horne Board Priority List

- A) Ownership of real estate
- B) Original Cost
- C) Probable future maintenance cost
- D) Type of construction (permanent or temporary)
- E) Suitability of existing facilities under existing conditions
- F) Feasibility of development to meet possible future needs
- G) Operating weather conditions
- H) Proximity to centers of population
- I) Operating area available
- J) Logistic support difficulties

Quonset Point scored well in most of these categories, and on August 3, 1946, Acting Secretary of the Navy John L. Sullivan announced that Quonset Point had been designated as the major peacetime naval air center on the North Atlantic Coast and that the base and its auxiliary at Charlestown, R.I., would continue on full operating status.

The decision to retain the base did not prevent the Navy from reducing the number of assigned personnel by about one-third. Military personnel declined most precipitously between Sepetember 1945 and March 1946 as the following table shows:

Table 9
Military Personnel Assignments
September 1945 - March 1946

| Department | September 1945 | March 1946 |
|--------------------|----------------|------------|
| A & R | 633 | 180 |
| BOQ | 135 | 118 |
| EM Barracks | 90 | 65 |
| WAVE Barracks | 22 | 4 |
| Chaplain | 6 | . 5 |
| Commissary | 63 | 52 |
| Communications | 116 | 81 |
| Disbursing | 17 | 13 |
| Fire Dept. | 1 . | 1 |
| Inspection | 170 | 115 |
| Medical | 164 | 115 |
| YDT-6 | 23 | 17 |
| OOD | 6 | 6 |
| Operations | 331 | 290 |
| Ordnance | 139 | 87 |
| Personnel | 25 | 42 |
| Public Information | 1 | 1 |
| Public Works | 61 | 28 |
| Ships Services | 151 | 74 |

| Supply | 119 | 78 |
|------------------------|------------|-------|
| Training | 7 7 | 37 |
| Transport | 10 | 6 |
| Welfare and Recreation | 50 | 38 |
| Personnel Relations | 4 | 2 |
| MAA | 20 | 6 |
| Shore Patrol | 25 | 19 |
| Temporary Duty | 580 | 595 |
| | 3,043 | 2,033 |

The main activities at Quonset Point between 1945 and 1974 revolved around the operations of the Assembly and Repair Department. Having lost its combat role, the naval air station had to rely on fleet support and maintenance operations to justify its existence. Quonset Point remained in service as long as it did because the A & R Department established an enviable record of efficiency and productivity.

On June 20, 1944, the Secretary of the Navy established the Industrial Survey Division. The Secretary authorized this body to visit and examine in detail the various industrial establishments of the United States Navy and to report on their general efficiency and productivity. The ISD issued reports on a number of establishments, and these reports became one additional criteria on which the Secretary based his decisions on post-war base retention. Nine members of the division, led by Captain L. M. Atkins, visited Quonset Point from September 10 to September 15, 1945. Their report, "Industrial Activities, Naval Air Station, Quonset Point, Rhode Island," No. 18 in the series, was issued on September 27, 1945.

The survey committee found Quonset Point to be "well located for its purposes," with easy access to the Atlantic Ocean but sheltered in Narragansett Bay. The report noted that the base was "adapted to any type of operation for land or water borne aircraft, including fleet training work," and that "the facilities, with minor exceptions, are modern, well arranged, and adequate for a larger work load than has been allocated or is in prospect."

In late 1945, the industrial workload of the A & R Department consisted of reconditioning PV and R-50 aircraft, modifications (principally radar) on TBF and TBM aircraft, minor repairs to miscellaneous aircraft, overhaul of engines (principally Pratt and Whitney R-2800-31 and R-288-43 series), and overhaul of aircraft and engine parts and accesories. The committee felt that the department was generally well organized and well run, although it noted that several components, especially the Engineering Division, needed more space. When the committee visited Quonset Point it found a Reduction in Force (RIF) program underway. The Department had cut its workforce by 15% in August 1945, and on September 17 another 506 employees were let go and 277 went on 90-day furloughs. Women made up 32% of the civilian and 8% of the military labor force, or 27% of the Department's total employment. The industrial work force was 80% civilian, a fact which elicited comment from the committee.

The Department's Personnel Relations Division drew some criticism in the committee report. On the positive side, the committee found that civilian personnel were well taken care of: feeding facilities consisted of one cafeteria, five shop canteens and two mobile units that served about 7,000 meals per day. The quality was "good, prices reasonable, and cleanliness excellent." Housing was no longer a serious problem, since most of the civilian employees were permanent residents of the surrounding region. 10

However, the composition of the labor force presented some problems, at least in the eyes of the committee. It noted that "the labor situation at Quonset Point is substantially different from that at any other air station surveyed." The difference lay in the fact that the labor force was 80% civilian. The norm at other naval air stations was approximately 50%, although at Cherry Point, S. C., the work force was 70% military. The committee also noted that, in contrast to other stations where military personnel were in high supervisory positions, including shop foremen, at Quonset Point there were no military supervisors at any level and no military men supervised civilians directly, although the A & R officer and his assistant were naval officers. (Most of the military personnel in the Department served in the Flight Test or Acceptance and Transfer sections.)

The preponderance of civilian personnel had created problems, the survey claimed. It noted that "a large part of the civilian labor force was procured from the textile industry" and the committee claimed that these workers "lacked a high standard of mechanical skills," and "possibly because the labor organizations of the textile industry have been accustomed to different problems than are prevalent in general machine industries, labor relations have occasionally been difficult." The report recommended the establishment of "firmer" personnel practices, although the committee recognized that this would inevitably cause serious problems:

The development of a stable and satisfactory labor policy, from what in the past appears to have been predominantly one of appeasement, to a firm and fair one, will presumably raise questions which must be carefully evaluated as to their equity and their effect for the best interests of the Station and the Government. This situation will be complicated due to the reductions in force already initiated. 13

Despite this issue, the A & R Department at Quonset Point was efficient enough to warrant inclusion of the base in the general continental aeronautical A & R program established by the Navy. Quonset Point became one of seven major A & R facilities; others were at Norfolk, Cherry Point, Jacksonville, Pensacola, San Diego, and Alameda.

Assembly and Repair operations continued, although at a level far below the peaks established during World War II. On July 28, 1948, as a result of standardization and modernization studies, the Department was renamed the Overhaul and Repair Department. These studies also caused the

Navy to report that it considered the Quonset Point 0 & R Department "overcrowded but fully grown" and that it looked to Jacksonville, Florida as the most likely place for any expansion of its major airbases on the Atlantic Coast. Quonset Point's cause was not helped by the growing chorus of complaints from pilots who disliked flying in Quonset Point's sometimes treacherous winter weather.

On Friday, October 15, 1948 a fire destroyed the engine repair section of the O & R shop, throwing 800 people out of work, at least temporarily. Despite the complaints that had been levelled at the base, the Navy sought immediate authorization from Congress to rebuild the facility. The House of Representatives allocated \$3,500,000 for a new engine O & R shop on April 8, 1949. By April 18 the Providence firm of Charles A. Maguire had produced plans for a new structure, 200' x 525', of steel and concrete construction. The contract for the new wing, which was erected just west of the Building 60 Administration Wing, was awarded on July 1, 1949 to Ayers-Hagan, Inc. of Providence and the Rome Construction Company of New York City. The new facility was to be the pilot plant for jet and turbojet O & R facilities, as the Navy began to make the transition from reciprocating to jet engines. Construction proceeded quickly, and the Navy dedicated the new facility in a brief ceremony on Friday, November 10, 1950. (HAER 148-150)

The Korean War had brought a new burst of activity to the O & R Department. In July 1950 the shops went to a six day work week because of increased workload. Initially, this work included reconditioning F4U and AD attack aircraft brought out of storage for the war. During 1950 the O & R Department prepared almost 900 of these planes for transfer to combat squadrons. Eventually the work reverted to more normal aircraft and engine overhaul as the units returned for service after eighteen months in the line. As in World War II, these planes returned to duty better than new since the overhaul included the incorporation of all modifications made subsequent to manufacture or the previous overhaul. 17

As the war in Korea drew to a close, the Navy chose NAS Quonset Point and Alameda to pioneer in the development of new programs designed to provide "maximum aircraft overhaul support for naval aviation from every tax dollar expended in the face of steadily mounting costs and the increasing complexity of modern aircraft." The Navy chose Quonset Point because "it is large enough, with some 2,500 employees, civilian and military, to be typical of the Navy's major 0 & R Departments, yet small enough to be managed during a prototype and development program." 18

The new program essentially involved the application of the techniques of production engineering and time study to the O & R Department. This marked a return to Frederick W. Taylor's system of scientific management (Taylorism) which had been introduced in the military arsenals in the late nineteenth and early twentieth centuries. Political pressure blocked the application of the principles of scientific management in government plants from roughly 1910 until the Navy tried its experiment at Quonset Point and Alameda, although these techniques had been developed to a high degree by the private sector.

The Navy examined private sector management practices, especially the use of electrical accounting machines in production control at the Brown and Sharpe Manufacturing Company. At Quonset Point and Alameda the Navy set up three "groups" to implement the new system: the Production Engineering Group, the Production Planning Group, and the Cost Control and Review Group. They worked together to design the most efficient shop layouts and established time and cost standards for performing each operation.

After the system was tested, "debugged," and installed, it became the standard for Navy O & R managerial practice. When an aircraft arrived for its overhaul, workers broke it down into as many as 2,000 component parts which were routed to 85 shops for work. Within about 60 days all the parts came together again, the aircraft was reassembled, test flown, and returned to service. Information on each step of the process was gathered, collated and analyzed by the Production Engineering Group.

The P. E. G. duplicated master information cards for every part of every aircraft that was overhauled at Quonset Point. These cards listed the work to be performed on each part, the shops involved, and the time the work should take. The P. E. G. also provided routing cards and job tickets, which it sent to dispatch centers in the various shops. Workers chose or were assigned work from these job tickets, and noted their work with stamps. Electronic machines tabulated individual production, cost, and the overhaul status of each aircraft and engine. The results generated provided a detailed picture of work flow in the shops, showed what each operation cost, and enabled managers to spot and correct bottlenecks that either slowed or increased the cost of the O & R job. The Navy was well pleased with the results it obtained from its new system.

The last significant construction projects at Quonset Point were undertaken in the late 1950's, primarily to provide more shop space. In 1951 the Navy awarded a \$2,731,000 contract for a 2,000-foot extension of Runway 16-34. This increased its length to 8,000 feet and made it the longest runway in the state. Major additions were made to Buildings 16 and 17, and in 1952 the Navy approved Charles A. Maguire plans for a new 100,000 square-foot storehouse, Building 536. [HAER 144-145] Building 620, another storehouse, was erected in 1954. [HAER 251] In 1954 the Navy also added a \$1,600,000 50,000 square-foot Avionics Extension to Building 60. The term "avionics" (aviation electronics), which has now entered general usage, may have been coined at Quonset Point. In any event, the Avionics Extension was a prototype of similar structures the Navy built at other stations. It was designed specifically for the overhaul of electronics equipment on a production line basis. The building was completely shielded from outside electrical interference and featured advanced air filtration systems and incandescent lighting to eliminate static.

As jet engines became more common in Navy useage and their overhaul demands became more pressing, the Navy decided to add a Turbo-Jet Engine Test Facility (Building 630) at Quonset Point. It was built from standard Navy

plans adapted by Charles A. Maguire in 1955. This too was a prototype of similiar structures erected at other major air stations later. The reinforced concrete structure provided test cells and control rooms where newly overhauled engines could be run at speed under carefully controlled conditions.

In 1949 the Navy decommissioned the last of its fixed-wing observation squadrons as helicopters assumed the short range attack scouting role. Quonset Point added helicopters to its 0 & R repertoire and in 1966 converted Building 373, an old warehouse, into the Helicopter Transmission Rework Facility.

By then, 0 & R shops were spread out across the entire station. Building 60 was still the center of the 0 & R Department, but operations had become much more decentralized.

In 1952 the Navy relocated a large summer home and designated it Building D-250, "Quarters AA," for use as the residence of COMFAIR—the ranking officer on base—who was at least one grade higher than the station commander. This is the most opulent of the officer's quarters at Quonset Point, and it is located on the station well away from the core of the base's buildings.

It is impossible to say with certainty when Quonset Point began its slow slide to oblivion. In 1950 the Navy named Quonset Point the search and rescue center for the northern half of the Atlantic seaboard, and in 1951 the Navy announced that Quonset Point would become "the nerve center for an intensive program of jet squadron training, air defense, and anti-submarine warfare." Quonset Point civilian payrolls totalled \$11,454,171 in 1950, and climbed to more than \$14,000,000 in 1951. Then the Korean War ended. In 1958 the Navy announced that it would operate Quonset Point on an austerity basis because it was short of funds and did not intend to ask for any additional funds for the station in the immediate future. In a statement that must have shocked many in Rhode Island, the Navy noted that it was not in a position to speculate on the long-term future of the base. 23

Nevertheless, Quonset Point's economic contribution to the State of Rhode Island grew during the 1960's, as Table 10 shows:

Table 10
Quonset Point Employment, Selected Years
1960²⁴

| Employment | | Payrol1 |
|------------|-------|-----------------------|
| Civilian | 3,882 | Civilian \$21,378,011 |
| Enlisted | 1,269 | Military 9,296,446 |
| Officers | 132 | Dependents |
| Dependents | 1,389 | Allotments 4,324,111 |

1963²⁵

| Employment | | Payrol1 |
|------------|-------|-----------------------|
| Civilian | 3,912 | Civilian \$23,604,672 |
| Enlisted | 1,408 | Military 9,773,122 |
| Officers | 146 | Dependents |
| Dependents | 2,145 | Allotments 5,138,520 |
| | | |

1969²⁶

| | |
|--------------------|-----------------------|
| Employment | Payro11 |
| Data not available | Civilian \$42,545,915 |
| | Military 38,221,086 |
| | Dependents |
| | Allotments 14,827,557 |

On April 1, 1967 the Overhaul and Repair Department became a separate command and was renamed the Naval Aircraft Rework Facility (NARF), part of the Naval Systems Command. Once again, despite the name change, the mission of the NARF remained essentially the same: to maintain and operate facilities and perform a wide range of rework operations on designated weapons systems, accessories, and equipment, to manufacture parts and assemblies as required, and to provide engineering support for the aircraft maintenance operations on the base. The Quonset Point NARF was the "Designated Overhaul Point" (DOP) for S-2 "Tracker" and E-1B "Tracer" antisubmarine warfare (ASW) aircraft, the C-1 "Trader" cargo aircraft, and the H-2 "Seasprite" and H-3 "Seaking" ASW helicopters. (The NARF was to have been the DOP for the S-3A "Viking" ASW aircraft and the TF-34 engine, but these programs were shifted elsewhere when the based closed.) The NARF also performed overhaul and maintenance on General Electric's T-58 and J-79 jets, plus Curtiss-Wright's J-65 and Allison's J-71 jet engines. Engine rework accounted for about 15% of the total workload. Another 20% of the workload involved the repair of various components, especially avionics equipment.

Eight departments and twenty-eight divisions controlled all air rework operations: 28

Table 11
Naval Air Rework Facility Table of Organization

Administrative Services Department

Manpower Services Division

Office Services Division

Security and Safety Division

Management Control Department and Comptroller
Financial Methods Division
Management Methods Division
Performance Review Division

Weapons Engineering Department
Design and Development Division
Avionics Engineering Division
Materials Engineering Division
Technical Services Division

Quality Assurance Department
Quality Management Division
Quality Verification Division
Quality Analysis Division

Production Planning and Control Department
Production Control Division
Production Planning Division
Material Planning Division

Production Engineering Department
Plant Engineering Division
Operations Analysis Division
Methods and Standards Division
Industrial Planning Division
Plant Services Division

Flight Test Department Administrative Division Flight Test Division Aircraft Line Division Production Department
Metals and Process Division
Weapons Division
Avionics Division
Power Plant Division

By 1973 the NARF had become a vast industrial complex of 38 buildings on 62.15 acres, providing 1,105,820 square feet of floor space. 29

Commander, Fleet Air Quonset (COMFAIR) continued to operate from Quonset Point throughout the 1960's. COMFAIR was also Commander, Hunter-Killer Force, U. S. Atlantic Fleet (HUKFORLANT) and Commander, Antisubmarine Warfare Group, Quonset (QUONSETASWGRP). The latter two commanders were specialized ASW units, controlling carrier-based hunter-killer teams. 30

Although the war in Vietnam brought renewed activity to Quonset Point, by about 1970 it was clear to many in the Navy, if not in Rhode Island, that the base's days were numbered. The end of the war, changes in ASW technology, budgetary considerations, and a new "political/military" strategy all worked together to hasten Quonset Point's demise.

In the space of about ten years, the naval air station had become an anachronism. Depsite the continuing influx of new commands and new duties, the weapons system the base was so intimately tied to, specialized ASW carriers, was being phased out of the Navy's inventory. As the number of ships and aircraft decreased, so did the need for Quonet Point's NARF. There were fewer reasons to let the base survive. As the closing of the base looked more and more likely, the Rhode Island Congressional delegation found itself powerless to prevent cutbacks of to arrange funding for the kinds of improvements that might have at least delayed the closing. When the time came to make base-closing decisions, Rhode Island's small size and lack of impact on the national political scene were telling. President Nixon's "Southern Strategy" influenced deployment decisions. In 1973 New England interests could not muster the effective arguments or the political power necessary to save the base. Quonset Point closed in 1974.

Quonset Point's biggest worry was the possible decommissioning of the Navy's World War II vintage Essex class carriers. These ships, commissioned between 1942 and 1945, had formed the core of the carrier task forces that had devastated Japan during World War II. Most of them had been decommissioned after the war, but a few had remained in service. Despite major renovations and reconstruction projects, the chief of which saw "slant" decks installed to allow simultaneous launch and recovery of aircraft, these ships were among the oldest active vessels in the fleet. 31

By 1970, the Navy had converted the four remaining Essex class carriers to specialized ASW carriers. Two of these, the U. S. S. Intrepid and the U. S. S. Wasp, both commissioned in 1943, were based at Quonset Point. In the face of impending budget cuts brought on by the end of the war in Vietnam, the Navy decided to eliminate its specialized ASW carriers and to make all its

remaining carriers multi-purpose. These ships would now carry specially trained ASW squadrons as well as their normal complement of strike aircraft. The budget cuts name largely from the carrier program because the Navy was unwilling to reduce spending on its nuclear submarine program. The Polaris boats were strategic weapons, part of the "Triad," America's nuclear strike force of manned bombers, land-based missiles and sea-launched ballistic missiles. The carriers were more properly a tactical system and therefore more vulnerable to cost-cutters operating on the "more bang for the buck" theory. There was also a mistaken feeling that ASW carriers were ineffective weapons. Many in Congress questioned the usefulness of conventional weapons against nuclear submarines. They believed that aircraft and ships could not maintain contact with the submarine. In practice, however, the Navy had shown that it could regularly maintain contact for three to five minutes, even when the submarine was actively trying to evade or break contact. Eventually the submarine would escape, but in three minutes of combat it would have been destroyed. These times were based on practice missions against American submarines that were generally harder to detect and to hold than their marginally inferior Russian couterparts. However, the Navy had no way to prove that its ASW methods were effective; it could hardly begin sinking Russian submarines as a demonstration.

By late 1970 the Navy had decided to phase out the Quonset Point carriers. The U. S. S. Wasp was decommissioned at the Quonset Point pier in July 1972. Local reaction to these moves was restrained, largely because few believed that the Navy would let its presence in New England disappear. The Providence Journal advised the region that it would have to accept whatever happened in the national interest, so that it would be unwise to let the problem degenerate into a partisan political issue. In the face of change, the paper suggested that it was time to consider other uses for the base. It advised widening and deepening the channel and turning basin to accommodate larger carriers and to consider Quonset Point as a possible submarine base. If this failed, the Journal called on the State to begin planning for the reuse of the site.

A local construction project, designed to eliminate a long-term regional transportation bottleneck, may also have played a role in the decision to phase out Quonset Point. In 1964 Rhode Island voters authorized a bond issue to finance construction of the Newport Bridge between Conancicut Island (Jamestown) and Newport. The bridge was the largest and most expensive single public structure ever authorized in the State. The Navy, whose approval was vital, approved the location but stipulated that the center span had to provide a free clearance of 1500 feet between towers and had to offer at least 205 feet of vertical clearance for 1000 feet. When the bridge opened on June 28, 1969, the main span was 1600 feet long and 215 feet above the water. The bridge cost \$61,000,000 and was designed to allow passage of any projected naval vessel until the year 2000. Although the bridge exceeded naval requirements, its existence posed a threat to free.access to naval facilities at Quonset Point and Newport. As a large, fixed structure, the bridge was an easy target. If demolised its wreckage would obstruct the East Passage into Narragansett Bay -- the principle channel -- and effectively trap shipping in the bay. Although the issue seems not to have been raised

publicly at the time of the closing, it is likely that this was one of the factors that counted against Quonset Point when the Navy evaluated its bases in the early 1970's. 34

Very direct warnings of the closing of the base began to appear as early as 1971. On January 19, former Rhode Island Governor John Chaffee, Richard Nixon's Secretary of the Navy, told the Newport Rotary Club that it would be a serious mistake "to assume that the Navy cannot get along without its bases and facilities on Narragansett Bay." Chaffee admitted that the facilities would be needed in wartime, but for peacetime training warmer, calmer waters and climates were preferred. Chaffee was in an excellent position to know. As Secretary of the Navy he prepared annual five-year development programs that showed new contruction and reduction in force programs. He could see Quonset Point's name on the cutback list, and in fact later admitted that he knew Quonset Point's time had come but downplayed talk of the closing. Chaffee placed the blame for the eventual closing squarely on the Rhode Island Congressional delegation. None of the state's Congressmen sat on any of the armed services committees that controlled defense legislation. He said "the State's largest single employer has had no representation where it counts the most." 35

The actual closing of the base was part of a long-term service-wide reduction in force program. Initially the Navy had tried to minimize the impact of the cuts by spreading them out "horizontally:" all stations had their funds cut by 10%. Between 1969 and 1973 the Navy reduced its personnel strength from 800,000 to 600,000. In 1968 the Navy had 900 ships in commission; in 1973 it had 635. By 1973, the "vertical" cuts had been extended to the shore establishment. Northern bases were particularly vulnerable because of President Nixon's "Southern Strategy." In an attempt to win votes in the traditionally Democractic South, Nixon had continued and expanded an trend toward transferring defense bases and spending to the South. This strategy was attractive for several reasons. Long-serving Southern congressmen controlled many key committees in both houses and were less reluctant to approve defense spending in their own region. Costs in the area were at least marginally lower, especially since labor unions appeared much less active and demanding in the South. Better weather made year-round flying and training operations possible. 36

Quonset Point was expendable because changing military technology had made it redundant. Strategic weapons could reach the United States from launch areas thousands of miles away. A base on the American coast was hardly essential; the Russian submarines had to be watched as they left their own bases, long before they entered even the maximum patrol range of Quonset Point aircraft. Electronic detection devices implanted on the ocean floor replaced the ASW bases. The American Captor system, deployed in deep water, can sit dormant for extended periods until activated. It can differentiate between passing surface ships and submarines and automatically attack its designated target. The Navy has no more seaplanes. Furthermore, the lines of communication Quonset Point was situated to protect had changed. Oil was the new target, and the tankers came from the south. Soviet submarines could

concentrate their attack on "choke points" and avoid the more heavily defended North American coastal waters. Strategic changes, coupled with continuing reductions in force, had made Quonset Point superfluous and vulnerable to a cutback.

Mr. Chaffee resigned as Secretary of the Navy in 1972, perhaps so that he would not have to bear the politically damaging stigma of presiding over the closing of bases in his home state. On April 10, 1973, Secretary of Defense Elliot Richardson met with the Massachusetts and Rhode Island Congressional delegations to warn that forthcoming Navy cuts would strike hardest at New England. Many observers felt that the Navy facility at Newport was the most vulnerable. On Monday, April 16, 1973 the Department of Defense told the members of the Rhode Island delegation that facilities at Newport would be reduced sharply and that Quonset Point would be closed completely. The announcement was made public on April 17, 1973. Quonset Point's time had finally and irrevocably run out.

Rhode Island's Congressional delegation reacted with impotent rage. Senator John O. Pastore was "stunned." Senator Claiborne Pell was "outraged." Representative Ferdinand J. St. Germain called the decision "a death blow." Representative Robert O. Tiernan said it was "worse than a natural disaster." The cuts were devastating:

Table 12
1973 RIF: Its Impact in Rhode Island

Lost Civilian and Military Payroll
Quonset Point: \$94,925,250/yr.
Newport: 214,136,991/yr.
Lost Military Jobs
Quonset Point: 8,367
Newport: 24,567
Lost Civilian Jobs

Quonset Point: 4,569 Newport : 3,798

Secretary Richardson said the Narragansett Bay bases were closed because they were "the most expendable." The Bay was too shallow for the large aircraft carriers.

The closing came as a "great shock" to Quonset Point's civilian employees. Most of them had felt that the base's strategic location would save it. The closing came at a time when the design and planning of the NARF facilities for the S-3A "Viking" were 90% complete. This work stopped. Many of the workers were disturbed when they realized the futility of the effort they had put into the program. Most of the employees subscribed to efforts to block the closing, including a mass protest rally on the steps of the statehouse in Providence; few retained any illustions that their efforts would succeed. 42

The Federal government tried to mitigate the impact of the closing. Many of the civilians were persuaded to retire early with slightly reduced benefits. Some civilians accepted transfers to other Navy bases. The military personnel were transferred elsewhere as a matter of course. Many civilians viewed Federal aid pledges as little more than lip service. The closing left a hole that would be very hard to fill.

Quonset Point's closing went according to plan. The Navy established a timetable based on the closure plan for NAS Sanford, Florida. The Navy also provided guidance in the form of a booklet entitled "Swords into Plowshares: The Salina Story," prepared by the United States Air Force on the impact and reaction to the closing of Schilling AFB, Kansas in 1966. Quonset Point's commands were shifted elsewhere, largely to Norfolk and Pensacola. Squadrons left, never to return. Flight operations ended on April 5, 1974. The "Crash and Rescue Desk Watch" for that day reads:

Closeout Day for Crash Crew at Quonset Point, 5 April 1974

1600 Field is officially closed.

On April 5 of 1974 Fire Station #3 will close its doors. Today we leave this fire station, on to bigger and better creations, some retiring, some just leaving, but most going on to other places. So we say goodbye, as we have done today, what should have been done yesterday, when we should have been gone the day before. Goodbye Crash.

/S/ Walter L. Dellinger April 5, 1974

Log is officially secured.

The Navy left the base on June 28, 1974. A small crowd of civilians and the 40 naval personnel remaining on the base attended the brief ceremony. After several speeches, Captain E. J. Klapka presided over the closing: "Commander Larson, secure the watch." The Executive Officer disappeared into the Administration Building for a moment, returned and announced, "The Watch is secured." "Very Well. Senior Chief Collins, retire the Colors." As the color party lowered the ensign for the last time, "a scratchy recording of 'retreat' echoed out around the surrounding buildings." After an operational career that lasted thirty-two years, eleven months and seven days (July 21, 1941 to June 28, 1974), the Navy removed Quonset Point from its rolls.

NOTES

ltr. VADM M. A. Mitscher, DCNO (Air) to Rep. Charles A. Gifford, September 27, 1945; ltr. Mitscher to Sen. Leverett Saltonstall, October 4, 1945; ltr, SecNav James Forrestal to Sen. David I. Walsh, October 31, 1945, all File NA 43, Vol. 2, RG 72.

²Davis, BuAer XI, pp. 273-274.

³Ibid., p. 214.

⁴Providence <u>Journal</u>, August 3, 1946, p. 6.

⁵"Industrial Activities, NAS Quonset Point, Rhode Island," Industrial Survey Division Report No. 18, September 27, 1945, p. 1. File NA 43, Vol. 2, RG 72.

6_{Ibid}.

⁷Ibid., p. 2.

⁸Ibid., pp. 3-13.

⁹<u>Ibid.</u>, pp. 13-18.

10_{Ibid.}, pp. 18-19.

11 Ibid.

12_{Ibid}.

13_{Ibid}.

14 Map, Naval War College Manuscript Collection, Newport, Rhode Island

15Sudsbury, Jackrabbits, p. 265; Providence Journal, June 6, 1948,
p. 1.

16Providence Journal, July 15, 1950, pp. 1-2; August 3, 1950, p. 22;
"Overhaul and Repair Department Visitors Guide," July 10, 1951, Providence
College Archives.

17Providence Journal, October 16, 1948, pp. 1, 4; April 4, 1949, p. 3;
July 2, 1949, pp. 1, 3; November 11, 1950, p. 1.

18 Providence Evening Bulletin, May 3, 1954, p. 16.

19_{Ibid}.

- 20 Ibid.
- $\frac{21}{\text{Lbid}}$. The author discussed the same topic with Mr. Williamson at the July 26, 1979 interview.
- 22Providence Evening Bulletin, May 3, 1954, p. 16; Historical Reports, 1951, NAS Quonset Point, Providence College Archives.
- ²³Providence <u>Journal</u>, March 27, 1950, p. 1; January 7, 1951, p. 7; March 19, 1958, p. 1; July 9, 1951, p. 7.
- 24Ltr, CO/NASQP to CO/NAB Newport, January 3, 1961, Public Affairs
 Office Files, Providence College Archives.
- 25"1963 Stockholders Report," Public Affairs Office Files, Providence College Archives.
 - 261969 Stockholders Report.
- 27 "Naval Air Rework Facility History and Command," January 1973, Providence College Archives.
 - 28"The NARF Story," Providence College Archives.
 - 29"NARF History and Command."
 - 30"Fact Sheet: COMFAIR," July 1971, Providence College Archives.
- 31 Quonset Point Public Affairs Office Files, Box 28, Manuscript Collection 27, Naval History Collection, U. S. Naval War College, Newport, Rhode Island.
- 32North Kingstown Standard-Times, October 22, 1970, p. 1, QPPAO Files, Newport; Providence Journal, October 21, 1970, pp. 1, 19; Captain Clarence O. Fiske (USN), Ret., interviewed by author, June 18, 1979, Newport, Rhode Island.
- 33Providence <u>Journal</u>, April 17, 1963, p. 6; October 25, 1970, pp. N2, 62.
- ³⁴Providence <u>Sunday Journal Magazine</u>, June 22, 1969, pp. 4-10; Providence <u>Bulletin</u>, <u>May 15</u>, 1973, p. 26. Mr. Allen first suggested this hypothesis in the July 26 interview.
- 35 Providence <u>Bulletin</u>, January 19, 1971, p. 1; Providence <u>Journal</u>, February 13, 1973, p. 36; April 18, 1973, p. 3.
- ³⁶Providence <u>Journal</u> February 13, 1973, p. 27; Fiske interview, June 18, 1979.

- 37 Providence Journal, April 10, 1973, p. 31.
- ³⁸Providence <u>Journal</u>, April 17, 1973, pp. 1, 16.
- ³⁹Ibid., p. 16.
- 40 Ibid.
- 41Providence Journal, April 18, 1973, p. 1.
- 42Henry Conway, interviewed by author, August 3, 1979, Quonset Point, Rhode Island. Mr. Conway died approximately one month after this interview.
 - 43 Ibid.
 - 44QPPAO Files, Newport.
 - 45Crash Log, April 5, 1974, Providence College Archives.
 - 46 Providence Bulletin, June 28, 1974, p. 1.

EPILOGUE

Despite appearances to the contrary, the story of NAS Quonset Point does not end in 1974. The Navy left and it is virtually impossible to conceive of a scenario that would bring the ships and the aircraft back. But the base still stands, largely undisturbed. [HAER 165-176] Since the closing, the State of Rhode Island, hoping to minimize the impact of the Navy pull-out, has actively pursued a policy of developing the base as an industrial park under the auspices of the Rhode Island Port Authority. Today many of the industrial facilities are used by the Electric Boat Division of General Dynamics as a fabrication center for Trident submarine hull components.

The area seems to have adjusted well to the base closing, at least economically. Initially, most people feared that the closing would be catastrophic, and in the short term it was. Suddenly a small town like North Kingstown found itself saddled with long-term bonded indebtedness it had incurred to expand its municipal services to serve Navy personnel. Now the Navy was gone but the debt remained. Prompt action by the state helped to minimize the impact, and at least one former employee of the base now feels that the closing was little more than a "temporary inconvenience." Some business leaders believe that the shift to private sector employment was best for the state in the long run, but others disagreed. Despite the peaks and valleys, the Navy represented a "steady, permanent source of employment." 4 Indeed, the Navy perhaps could have found reasons to keep Quonset Point in operation. Today, the job situation at the base is less secure. Electric Boat is expanding its operations at Quonset Point, but it is possible that another round of SALT talks could stop this work in its tracks. As this is written that prospect appears highly unlikely, but the question is one that must be considered.

Rhode Island lost more than jobs when the base closed. Civilian employees wept when they heard of the closing, and the prospect of impending unemployment was only one cause for saddness. Quonset Point employees saw themselves as part of an "unusual family." They recognized that the nature of their work made them "different from the average civilian in Rhode Island." Their work, "different, alien" from usual civilian pursuits, gave them a sense of importance. When the Navy left, its former employees lost this sense of uniqueness and their morale suffered.

The base also provided the community access to a wide variety of views and customs. Navy personnel represented a cross-section of society, and as they became part of the community the opportunity for wide-ranging social intercourse brought a uniquely "military-cosmopolitan" flavor to the region. Without the base a sense of insularity, perhaps in part a reaction to the trauma of the closing, returned. There is no empirical data to support this idea, of course, but this feeling is shared by several people who have had intimate contact with the base over the last forty years.

The United States became a dominant world power in part as a result of the role it played in World War II. The war also witnessed the emergence of airpower as one of the decisive factors in modern warfare. The Quonset Point Naval Air Station stands as an example of a coastal defense work specific to that conflict, its role uncomplicated by earlier developments or later additions. Quonset Point is the only significant World War II airbase in the Northeast. It completes a continuum of regional defense fortifications that date back to the Revolution, from Butts Hill Fort (c.1778) to Fort Adams (1824-54 and 1896-1901). Each demonstrates changes in the technology and strategy of American coast defense.

Quonset Point's passing should not go unnoticed. It stands today as a monument to America's military, technological and architectural heritage, a reminder of the days when the "Arsenal of Democracy" could produce bases on demand to help check the spread of political systems inimical to our own.

NOTES

¹Conway interview, August 3, 1979.

 2 Williamson interview, July 26, 1979.

3 Ibid.

 $^4{\rm This}$ idea was suggested by Mr. Williamson. Mr. Conway presented a similar view during my discussions with him.

⁵Chase, National Register Nomination, Item 8, pp. 6-10.

Appendix 1

The Quonset Hut and The Davisville Advanced Base Depot

Quonset Hut (kwon' sit) A trademark for a prefabricated portable hut having a semicircular roof of corrugated metal that curves down to form walls. [First made in QUONSET, Rhode Island.]

William Morris, ed. The American Heritage Dictionary of the English language.

Boston; Houghton Mifflin Company, 1976.

The name "Quonset" is known around the world not because of the naval air station but because of a line of prefabricated structures designed and initially produced at Quonset Point. The ubiquitious "quonset hut" evolved in response to many of the same conditions that fostered the construction of the naval air station. To a remarkable degree the story of the Quonset hut parallels that of the base itself. Designed in response to specific demands generated by the deteriorating world situation in 1941, the hut moved swiftly from concept design to construction and use. The "career" of the Quonset hut further demonstrates the extent to which the United States was able to quickly mobilize its vast industrial potential under the pressures of war. Like the naval air station, the hut serves as a reminder of the miracles of production the United States performed between 1941 and 1945.

The Navy Bureau of Yards and Docks signed the Quonset Point construction contract (NOy-4175) with George A. Fuller and Merritt-Chapman & Scott in July 1940. It was not long before the Navy realized that in the Fuller/Scott consortium it had a team of competent and efficient construction contractors that appeared capable of superintending other large-scale construction contracts in the continental United States and abroad. As the Navy called on Fuller and Scott for other projects, it gave the firms the title "East Coast Contractors." From their base at Quonset Point, Fuller/Scott assumed responsibility many major construction projects. The logistic demands of these other projects showed that the contractors and the Navy as a whole needed a design for a relatively inexpensive prefabricated structure that could provide at least temporary housing for various operations at these construction projects. The Navy requested that Fuller architects study the problem; within days the architects had produced the initial plans for the structure that would become widely known as the quonset but.

In September 1940 the United States signed the "destroyers-for-bases" agreement with England. In return for fifty World War I vintage destroyers, badly needed in Britain's war against the U-Boat, England agreed to grant to the United States the right to build bases on British territory in the western Atlantic Ocean. One of these bases was to be located at Argentia Bay, Newfoundland; the Navy added the necessary construction projects in Newfoundland to the Fuller/Scott Quonset Point contract. Even as work

continued on the Quonset Point Naval Air Station, Fuller/Scott engineers turned their attention to the needs of another major construction project in the harsh conditions of southern Newfoundland.

When the Land-Lease Act passed in March 1941, the United States decided to build four bases in the United Kindom (two in Scotland and two in Great Britain) to handle the flow of war materiel. The Navy designated Quonset Point as the assembly point for the construction materials needed for these bases. This influx of cargo, coupled with the rapidly progressing construction activities at Quonset Point, combined to create serious congestion and overcrowding at the base. The Navy decided to alleviate these problems by constructing an "Advanced Base Depot" titled Davisville on a site adjacent to the naval air station.

Quonset Point was a logical location for these new activities. The site was already served by a railroad line, and much of the construction material destined for use overseas could be shipped from the pier the contractors were using for the naval air station project. The contractors had already gathered a large work force and their supply departments were prepared to handle large quantities of materiel.

In March 1941 Admiral Ben Moreell of the Bureau of Yards and Docks met with representatives of the Fuller Company at their offices at Quonset Point. He told them the Navy needed a line of prefabricated structures, easy to ship and erect, and adaptable to any geographic or climatic condition. He told the design team that the Navy wanted the plans immediately and needed to start shipping the first units in a month. Fuller agreed to add yet another project to the Quonset Point contract and the firm's hard-pressed architects began work on the design at once. Following a Navy directive, they utilized the British "Nissen Hut" as their model and had plans ready by March 30, 1941, less than a month after Admiral Moreell had announced the project. The Navy approved the design for immediate construction. While quonset huts were being designed Quonset Point, Fuller crews working under Navy mandate acquired and cleared a site now known as West Davisville, and erected a factory for quonset hut manufacture.

The semicircular shape of the quonset hut initially caused some problems. A number of firms tried in vain to perfect the metal forming techniques that would assure the rigidity, uniformity, and strength the Navy demanded. During March, the Anderson Sheet Metal Company of Providence developed a shaping process that worked; it became the prime quonset hut contractor. Manufacture of quonset hut began on April 14, 1941. The first units destined for overseas use left the Quonset Point pier on June 11, 1941.

Meanwhile, work on "Advanced Base Depot, Davisville" continued. Fuller had the depot fully operational by June 1942 and by the end of the year had shipped approximately 286,000 tons of material from the base. ABD Davisville covered an area of approximately 1,900 acres. Contractors laid twenty miles of railroad track, forty miles of roads and built a pier 1200 feet long and 250 feet wide at the site. They also erected many storage,

QUONSET POINT NAVAL AIR STATION HAER NO. RI-15 Page 108

maintenance, manufacturing and administration buildings; many of these were Quonset huts.

Contractors eventually fabricated 32,253 Quonset huts at the west Davisville factory. Thousands more were produced at plants throughout the country. The most common of the standardized hut designs was $20' \times 48'$, weighed 12,000 pounds, and could be erected by an eight-man crew in one day.

The quonset hut became well known during the War. It served as shelter for thousands of G.I.'s in all theaters of operation, from the South Pacific to the Arctic. Its adaptability, coupled with the resourcefulness of American servicemen, resulted in the Quonset huts becoming hospitals, chapels, galleys, refrigeration buildings, mess halls, laundries, recreation centers, shower and latrine buildings, as well as barracks. Many Quonset huts survive at Quonset Point and Davisville, including Quonset Point's Buildings 686 and DT-42.1

¹Material for the Appendix was compiled from the following sources: The "Quonset Hut," typescript, Providence College Archives, BuDocks <u>Building Bases</u>; Grandall, <u>Fuller Company</u>; Chase, National Register nominations for Camp Endicott, Davisville C. B. Center, and Quonset Point Naval Air Station.

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